

HIGH SCHOOL TEACHERS' PERCEPTIONS OF TEACHER-LEADERSHIP

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by

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ABSTRACT

To support the professional knowledge development of all teachers, schools in North America have implemented teacher-leader roles (Angelle & DeHart, 2011; Fullan, 2003; Leithwood, Harris, & Hopkins, 2008). The effectiveness of developing professional knowledge depends upon numerous variables such as school culture, collaborative environments, resources, and organizational paradigms. It follows, then, that understanding what influences teachers' perceptions of teacher-leadership can determine best practices of implementing teacher-leader roles within schools and across school divisions.

The literature reviewed in this study falls into four main categories: School culture, Distributed Leadership as Teacher-Leadership, Teacher-Leader Roles, and Teachers' Perceptions of Teacher-Leadership. Furthermore, the purpose of this study was to investigate high school teachers' perceptions of teacher-leadership. Research, using a quantitative instrument, focused on conducting an inquiry into teachers' perceptions of teacher-leadership and what influences teachers' perceptions. The study investigated the differences in perceptions according to these specific considerations: attained education level, teaching experience, formal teacher-leader roles, and gender.

The primary objective of this research was to investigate the differences in high-school teachers' perceptions of teacher-leadership within the context of one Saskatchewan urban school division according to educators' attained education level, teaching experience, formal teacher-leader roles, and gender. To that end, the study investigated teachers' perceptions of teacher-leadership based on four factors of teacher-leadership: supra-practitioner, sharing expertise, sharing leadership, and principal selection (Angelle & DeHart, 2011). Moreover, the following research questions previously referred to helped sharpen the focus of the study:

1. What are the differences in teachers' perceptions of teacher-leadership according to different degree levels attained?
2. What are the differences in teachers' perceptions of teacher-leadership according to varying teaching experience?
3. What are the differences in teachers' perceptions of teacher-leadership according to teachers who occupy formal teacher-leader roles compared to those who do not occupy formal teacher-leader roles?
4. What are the differences in teachers' perceptions of teacher-leadership according to gender?

This study used a quantitative methodology to examine high school teachers' perceptions of teacher-leadership through Angelle and DeHart's (2012) Teacher Leadership Inventory resulting in empirical evidence collected via one-way between-groups ANOVA- the results of which provided both descriptive and inferential statistics. Descriptive statistics indicated the spread of scores through variance, standard deviation, and range while describing independent and dependent variables (Creswell, 2012). Inferential statistics helped to "compare groups or related two or more variables" (p. 187). Independent variable of the study included; degree level attainment, years of teaching experience, occupying a position of formal teacher-leadership, and gender. Furthermore, the dependent variables included Sharing Expertise, Sharing Leadership, Supra-Practitioner and Principal Selection. The findings of the data showed statistical difference in the dependent variables Sharing Expertise and Sharing Leadership.

As a result of this study, implications for theory include whether the TLI needs to consider a Canadian context. In addition, implications of practice revealed in this study supported the use of the Teacher Leadership Inventory (Angelle and DeHart, 2012) as a possible

screening instrument for teachers' perceptions of teacher-leadership. Finally, implications for further research; this is the second study to use the Teacher Leadership Inventory, as such, it will be beneficial to use the TLI in more applications to collect additional data and to identify norms for the instrument.

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CHAPTER 1

Introduction to the Problem

To support the professional knowledge development of all teachers, schools in North America have implemented teacher-leader roles (Angelle & DeHart, 2011; Fullan, 2003; Leithwood, Harris, & Hopkins, 2008). The effectiveness of developing professional knowledge depends upon numerous variables such as school culture, collaborative environments, resources, and organizational paradigms. Ideally, opportunities will exist within school cultures for teachers to build relationships that foster teacher-leadership, and school leaders continue to support teacher-leader roles through distributed leadership within their naturally occurring professional-learning cultures (Fullan, 2010).

When teachers collaborate to increase their professional knowledge, they must operate within school culture, and working within an environment of shared pedagogy will inform teacher actions (Celik, 2010). Within professional-learning cultures, teachers co-create professional knowledge and skills, which influence their professional beliefs. How members of the professional-learning culture understand teacher-leadership influences interactions with teacher-leaders. Thus, Angelle and DeHart (2011) have noted that it is important for educators to understand the various influences on teacher behaviour when developing successful teacher-leaders.

Teachers' experiences do indeed influence the level to which they engage in collaboration (Usher & Pajares, 2008). In their review of 27 studies on sources of self-efficacy in schools, Usher and Pajares examine contextual factors such as gender, ethnicity, and academic ability as sources of influence on self-efficacy. While the research of Usher and Pajares focused

on student self-efficacy, one can apply their research to teachers as learners in a school culture. Their social-cognitive approach considers teachers also as learners; therefore, teachers' gender and academic ability could well influence the level to which teachers engage in collaboration. To this end, research that focuses on situational contexts such as gender and academic ability can be insightful when examining teacher-leadership.

As one acknowledges that teachers co-create professional knowledge within professional-learning cultures, it is important to identify how members of that culture collaborate. Levels of collaboration, for example, can vary based on gender (Dooner, Mandzuk, & Clifton, 2008) and impact how teachers function within professional-learning cultures. An understanding of what role gender plays in teachers' perceptions can inform how schools implement teacher-leadership.

To elaborate, in recent years, schools fostering teacher-leadership commonly use the framework of distributed leadership (Harris, 2012). Distributed leadership allows for the distribution of school leadership through socially constructed beliefs, values, and assumptions among teachers (Lambert, 2003). It follows that distributed leadership creates multiple leaders, resulting in increased teacher-leadership capacities in schools.

Teacher-leadership, then, can function as a driver in achieving increased professional knowledge. Lambert (1998), for example, declares the positive relationship between forms of teacher-leadership, teacher collaboration, and capacity building, all key elements of teacher-leadership and professional knowledge. Relationships developed for the purpose of enhancing teacher professionalism ultimately build teacher-leadership (Katzenmeyer & Moller, 2009). If the role of a teacher-leader is to support professional learning, then it is important to understand what influences teachers' perceptions of the formalized teacher-leader role.

In the past ten years, numerous researchers have focused their attention on the topic of

teacher-leadership (Crowther, Ferguson & Hann, 2008). Currently, school divisions have implemented teacher-leader roles as a strategy to help support the development of professional knowledge (York-Barr & Duke, 2004). Therefore, the topic of teacher-leadership has a significant place in current educational research (Crowther, Ferguson, & Hann, 2008; Danielson, 2006; Harris, 2003; Lambert, 2003; Leithwood, Jantzi, & Steinbach, 1999; York-Barr & Duke, 2004).

As an example, Smylie and Denny (1990) found teacher-leadership activities and kinds of interactions greatly influenced teachers' perceptions of teacher-leadership. Similarly, in their empirical study, Angelle and DeHart (2011) maintained that "the idea of teacher-leadership is perceived differently by teachers according to their experience... and whether the teacher holds a leadership position at the school" (p. 155). It follows, then, that understanding what influences teachers' perceptions of teacher-leadership can determine best practices of implementing teacher-leader roles within schools and across school divisions.

In light of previous research, current scholars (Angelle & DeHart, 2011; Jarrett, 2010) recognize the importance of researching teachers' perceptions to better inform teacher-leadership. Therefore, in educational research administrators must consider the following important issues of teacher-leadership: What influences teachers' perceptions of teacher-leadership? Are there different understandings of what is teacher-leadership? Do current teacher-leaders hold a similar understanding of teacher-leadership compared to teachers who do not hold formal positions of teacher-leadership? Would not the study of teachers' perceptions of leadership help augment previously limited research in the field of educational administration? Because of the aforementioned questions, I therefore maintain that a more accurate understanding of teachers' perceptions can support the successful implementation of new

teacher-leader roles throughout the educational field.

Purpose of the Study

The purpose of this study was to investigate high school teachers' perceptions of teacher-leadership. Research, using a quantitative instrument, focused on conducting an inquiry into teachers' perceptions of teacher-leadership and what influences teachers' perceptions. The study investigated the differences in perceptions according to these specific considerations: attained education level, teaching experience, formal teacher-leader roles, and gender.

Research Questions

The primary objective of this research was to investigate the differences in high-school teachers' perceptions of teacher-leadership within the context of one Saskatchewan urban school division according to educators' attained education level, teaching experience, formal teacher-leader roles, and gender. To that end, the study investigated teachers' perceptions of teacher-leadership based on four factors of teacher-leadership: supra-practitioner, sharing expertise, sharing leadership, and principal selection (Angelle & DeHart, 2011). Defined more explicitly in Chapter 2 are those four factors. Moreover, the following research questions previously referred to helped sharpen the focus of the study:

5. What are the differences in teachers' perceptions of teacher-leadership according to different degree levels attained?
6. What are the differences in teachers' perceptions of teacher-leadership according to varying teaching experience?
7. What are the differences in teachers' perceptions of teacher-leadership according to teachers who occupy formal teacher-leader roles compared to those who do not occupy formal teacher-leader roles?
8. What are the differences in teachers' perceptions of teacher-leadership according to gender?

Importance of the Study

Insufficiently considered in educational research is a quantitative perspective of teachers' perceptions of teacher-leadership, and the strength of quantitative research is in its ability to identify areas for further research while increasing policy-makers' understanding of what influences teachers' perceptions. The significance of this quantitative research can structure further research in its unique perspective on teachers' perceptions of teacher-leadership.

Although one can find many studies of the concept of teacher-leadership, the teachers' perception of the formalized teacher-leader role in the context of schools has largely been lacking in the literature (Angelle & DeHart 2011). Therefore, the study of teachers' perceptions is theoretically significant; unique to this study is a focus on teachers' perceptions rather than administrators' or teacher-leaders' perceptions of teacher-leadership. While some initial work is underway, Harris (2012) believed more in-depth work is required to explore distributed forms of leadership, including teacher-leadership.

Ultimately, this study can positively inform educational policymakers' understandings of what influences teachers' perceptions of teacher-leader roles, thus more readily creating clearer professional development and policy regarding teacher-leader roles in high schools. These implications, as noted by Angelle and DeHart (2011), can expand school-improvement vision when implementing school reforms such as teacher-leadership and school-culture remediation.

Simply put, this study can enhance the practice of formalized teacher-leader roles within high schools. Angelle and DeHart (2011) believed the disparity in view of teacher-leadership influences researchers' ability to understand perceptions of the work of teacher-leaders in the field. A clearer understanding of what differences exist in teachers' perceptions of teacher-leadership according to varying education levels, varying teaching experiences, formal teacher-

leader roles, and lack of formal teacher-leader roles will benefit daily educational practice. This in turn may allow the successful practice of teacher-leadership in schools.

Definitions Used in this Study

School Culture: a set of attributes shared by the “group with a shared history” (Deal & Peterson, 2009, p.11).

Professional learning: the environment of shared responsibility that empowers “teachers as professionals” (Çelik, 2010, p. 107). Fleming and Kleinhenz (2007) used the term “profession learning culture” versus “professional learning community” to highlight that practitioners share sophisticated professional knowledge and skills. Teachers form this acquisition of knowledge and skills through on-going, evolving relationships, which the authors describe as culture.

Distributed Leadership within schools: the distribution of leadership practices through the flexible roles of leader and follower (Gronn, 2002; Harris, 2008).

Teacher-leadership: teachers’ collective actions develop relationships and establish professional interactions, that in turn influences instructional practices (Harris, 2003). The relationships and interactions occur both within and beyond the classroom (Katzenmeyer & Mollen, 2009). Therefore, teacher-leadership is believed to be socially constructed while remaining culturally sensitive (Harris, 2008)

Teacher-leader roles: the roles that include administrator, department chair, teacher-leader, peer-coach, staff developer, and master teacher and mentor (Angelle & DeHart, 2011; Katzenmeyer & Moller, 2009; Leithwood et al., 1999; Lieberman & Miller, 2011; Muijs & Harris, 2003).

High School: for the purposes of this study, an urban school consisting of Grades nine through twelve.

Stepping Out (Kiddey, 2006): a school-wide approach to student-literacy improvement. This Canadian professional-development model was developed to meet the unique needs of adolescent learning.

Delimitations of the Study

In this study, quantitative parameters included all high-school teachers within high schools in one urban school division. The study included only high-school teachers in one urban school division, since the sufficiently high number of participants provided statistical reliability for the survey. Initially, the plan was to use the Teacher-Leadership Inventory (TLI) created by Angelle and DeHart (2011) with both high school and elementary schools. The school division in which the study took place, however, has not implemented formalized teacher-leader roles in each elementary school. Based on this information, the proposed study focused on the perceptions of teacher-leadership among high-school teachers only.

The cross-sectional survey took place at a specific point in time, with data collected between February 2013 and March 2013, thereby limiting the length of time associated with data collection.

Limitations of the Study

Necessarily, the participants' willingness to complete the survey and answer honestly based on their understandings of their experiences limited this study. Further, parameters beyond the researcher's control include teachers' understandings of the role of formal teacher-leaders. Without clearly articulated definitions of the teacher-leader role set by the studied school division, teachers' understandings naturally varied. This circumstance might have influenced how they interpreted the questions within the questionnaire. The school division researched currently does not have a specific definition for the role of teacher-leader; therefore,

the survey articulated no definition.

A limiting parameter included the TLI. Previous applications of the TLI's fourth factor, principal selection, report Cronbach α reliabilities of .56. While this factor scored significantly lower reliability than did the other three factors, it remained within the acceptable range; Chapter 3 will address this situation further under methodologies.

Another limitation beyond the control of the researcher was the principal's role within the context of the study. The principalship within the researched school division was in-scope; yet the TLI instrument was developed in seven states of the United States of America where the principalship is out-of-scope. This difference therefore yielded differing results from the initial application of the TLI. Principals in the researched school division do not hire teacher-leaders as do the principals in U.S.A.

Next, a limitation to the study included the number of participants eligible to participate in the study while conducting a one-way between-groups ANOVA. ANOVAs require a large number of participants to facilitate equal groupings. a maximum two-hundred and fifty potential participants in this study necessitated groupings compared to the norm data set.

Survey research is a common kind of research in educational fields because of its advantages and limited disadvantages (Muijs, 2011). The advantages of survey research include its flexibility in studying a wide range of research questions, its ability in studying relationships between variables, and its efficiency in gathering large numbers of data. In addition, survey research using a questionnaire instrument can "more easily guarantee respondents' anonymity which may lead to more candid answers" (p. 39). Limitations to survey research include a difficulty in communicating a more in-depth understanding of processes and contextual differences through questionnaires. Gathering information on respondent self-reporting

behaviours can be problematic, as self-reporting is not as reliable as observational reporting.

Assumptions

One of the basic assumptions entering this study included the following: honest and collaborative environments can produce strong leadership. The strength of leadership entails the ability to take varying points of view into consideration while guiding a group towards a common vision. Leadership depends of the strength of all professionals contributing to the common vision.

In addition, another assumption was that all high-school teachers engaged in the opportunity to work with formal teacher-leaders.

The Context of this Study

The study took place at the Cecilia School Division, a large urban school division in Saskatchewan. Understanding the context of the Cecilia School Division will aid other educators in identifying the similarity of their own school situations in relation to those of this study.

The concept of formal teacher-leaders is an initiative that the Cecilia School Division has been developing over the last three years. Within the School Division, the formal teacher-leaders have been tasked with implementing a new math curricula and school-wide Stepping Out literacy strategies (Kiddey, 2006). Each school has designated one teacher-leader, giving him or her release time to develop the cross-curricular implementation of literacy strategies.

In addition, the Cecilia School Division designates two teacher-leaders to support the implementation of new mathematics curricula across the School Division. One teacher-leader works with high schools, while the second teacher-leader works with elementary schools. The Division gives each teacher-leader half-time release from his or her teaching duties to develop the implementation of new mathematics curricula. As a result, teacher-leaders support teachers

in developing teaching strategies to support student learning. The teacher-leaders also communicate directly with the Ministry of Education, school community councils, and school-division administration to help implement new mathematics curricula.

The Researcher

Katzenmeyer and Moller (2009) suggested that an understanding of leadership must primarily begin with one's self. Thus, I began my research with myself, for becoming aware of one's own assumptions, biases, and beliefs will influence one's perceptions. I will endeavor to articulate my assumptions, which may influence how I interpret the collected data.

My primary educational mentor is of great influence on me: my father. I grew up in a household with much dialogue and questioning, but very few prescribed answers. This environment instilled in me a mindset of looking at an issue or challenge from multiple perspectives with the possibility of no single right answer. As my educational mentor, my father has challenged and supported me to seek knowledge in order to make informed decisions, thereby influencing me to ask what teachers' perspectives consist of and what influences their understandings.

The study of teacher-leadership is also applicable to me as an educator, for I have experience working with informal and formal teacher-leaders who have challenged me professionally. My colleagues have challenged me not only to be a reflective practitioner, but also to share my growth, knowledge, and challenges. In sharing my experiences and in developing my professional knowledge, my colleagues know me as an informal teacher-leader. Such a role I initially did not set out to attain; however, within my natural progression as a reflective practitioner, I have become a teacher-leader.

Moreover, throughout my graduate studies, researchers' diverse perspectives on teacher-

leadership have intrigued me. Personal experiences initially formed my understanding of teacher-leadership, but as I pursued my graduate studies, I was exposed to numerous perspectives of teacher-leadership that both challenged and expanded my understanding of what can be teacher-leadership. Currently, I understand the concept of a teacher-leader as a teaching professional who works collaboratively with teachers to support teachers' professional growth. Teacher-leadership can occur in the context of both formal and informal teacher-leaders. I firmly believe that professional growth is most powerful when the work of teachers focuses on improving their own learning.

Perhaps surprisingly, in sharing my evolving understanding of teacher-leadership with my colleagues, I found myself defending the possible positive outcomes of collaborating with teacher-leaders. Struck by how my colleagues perceived teacher-leaders, I questioned how teacher-leaders could fulfill their roles amid teachers' negative foundational perspectives. Such scenarios caused me to question how teachers perceive teacher-leadership and to question how teachers choose to work collaboratively with those teacher-leaders. Ultimately, researching teacher-leadership has informed my professional practices in working with a variety of professional colleagues.

The study of teachers' perceptions of teacher-leadership is unique to educational research, educational research that has to this point focused on the role of teacher-leaders as experienced by teacher-leaders or as understood by the superiors of teacher-leaders. But by including, studying, and analyzing the perspectives of teachers working with teacher-leaders, we can form a well-rounded understanding of teacher-leader roles.

Organization of the Thesis

Organized into five chapters, the thesis begins with Chapter 1 outlining the background

of the study, and identifying its overarching problem and context. Chapter 2 contains the literature review, which will explore quantitative and qualitative research concerning school culture, professional learning culture, distributed leadership as teacher-leadership, teacher-leader roles, and teacher perceptions of teacher-leadership. Chapter 3 describes the research design and the methodology for conducting the research. Chapter 4 outlines the findings of the research. Chapter 5 comprises the discussion and analysis of the research findings in relation to the research questions.

CHAPTER 2 REVIEW OF RELATED LITERATURE

The focus of this research is high-school teachers' perceptions of teacher-leadership. Using a quantitative instrument, the study conducted an inquiry into teachers' perceptions of teacher-leadership and what influences teachers' perceptions. The study investigated the differences in perceptions according to these specific considerations: attained education level, teaching experience, formal teacher-leader roles, and gender.

Teacher-leadership has a significant influence on schools when it is widely distributed (Leithwood et al., 2008). This literature review explores evidence surrounding influences affecting teacher-leadership; this consideration includes teacher-leadership as it exists within school culture, professional learning cultures, distributed leadership as teacher-leadership, teacher-leader roles, leadership capacity building as well as sustainability, and teacher perceptions of teacher-leadership. The first section of the literature review presents elements of school culture in relation to teacher-leadership; also explored is teacher-leadership as experienced through professional learning cultures. The second section focuses on distributed leadership research: specifically, the ambiguities of the term and various conceptualizations of teacher-leadership. The third section examines several conceptualizations of teacher-leader roles. The fourth section highlights research on the effects of teachers' perceptions of teacher-leadership; insufficiently considered in quantitative educational research are teachers' perceptions of the formal teacher-leadership roles.

School Culture

Each school culture is unique. Numerous researchers (Çelik, 2010; Conzemius & O'Neill, 2001; Crowther et al., 2008; Fullan, 2001; Leithwood et al., 2008) have concluded that school culture impacts both professional performance and student achievement. School culture

is exemplified by the dominant values, norms, assumptions, philosophy, rules, ceremonies, and symbols shared by the school's members, and the climate of the organization (Çelik, 2010; Harris, 2012); school members' daily interactions demonstrate school culture (Peterson & Deal, 2009). What follows is an overview of educational research on school culture.

School Culture Defined

Finding a concise definition of school culture is challenging because of a variety of influences. In his book, Hargreaves (1994) defined school culture as a lens through which participants view themselves and the world. Therefore, revealed through school culture is unconscious operational organizations; the way members act and relate to each other exemplifies school culture. These members include teachers, administrators, students, parents, and community members. Peterson and Deal (2009) further understood culture as created by a group of basic assumptions and beliefs shared by members of an organization closely aligned through “unwritten rules and traditions, norms, and expectation” (p.2-3). School culture is a set of attributes shared by the “group with a shared history” (p.11). Shared beliefs permeate the way people act, what they talk about, and how they interact with colleagues. In turn, the group members operate in an unconscious manner, based on their shared knowledge. What follows is a review of educational research examining how school cultures function in collaboration.

Collaborative School Cultures

Collaborative school culture, as defined by Fullan and Hargreaves (1996) in their book, honour and develop the diverse strengths of colleagues. Diverse strengths of colleagues in turn support diverse leadership approaches, allowing teacher-leadership to flourish. According to Fullan and Hargreaves, embedded in the daily personal and professional interactions of teachers is collaborative culture. Nurtured by “help, support, trust and openness” (p.48) with a focus on

shared educational values, collaborative school culture supports innovative leadership approaches. A “commitment to continuous improvement” (p. 52) of professional practice is a benefit of collaborative school culture. Fullan and Hargreaves believed daily professional interactions of teachers create a supportive environment that encourages innovative leadership opportunities. What follows is an overview of selected literature surrounding professional learning cultures, as they exist within school culture.

Professional Learning Culture

Qualitative analysis of 200 organizational stories informed Celik’s (2010) understanding of professional learning cultures. Professional learning culture was defined as the environment of shared responsibility that empowers “teachers as professionals” (Çelik, 2010, p. 107) and has been studied in great depth in the educational field. The focus and quality of professional interactions foster professional learning culture. Teachers with individual strengths and weaknesses collectively form a professional learning culture (Çelik, 2010; Lambert, 2003). Through empirical evidence, professional learning cultures were shown to re-shape and maximize the potential growth of all teachers (Harris, 2008). Examining professional learning cultures demonstrates how school culture functions at an unconscious level within a school (Fullan & Hargreaves, 1996). It is therefore important to understand how professional learning cultures function when examining teacher perceptions.

How professional learning culture functions. A professional learning culture is considered effective when teachers can share their complex professional knowledge and skills with each other (Çelik, 2010; Fleming & Kleinhenz, 2007). Fleming and Kleinhenz’s (2007) book described professional learning culture as a shared “technical culture” (p.8) developed through professional learning conversations leading to a deeper understanding of both

professional content and professional knowledge. Within professional learning cultures, teachers have the capacity to provide useful and timely feedback to each other through professional conversations; such feedback among professionals promotes independent thinking and supports autonomous, professional growth. A professional learning culture fosters continual conversations “about deep aspects of teachers’ practice” (p.11) formed through professional reflection. Deep aspects of professional conversations include in-depth understanding of content from the learners’ points of view, how to promote students’ independent thinking, and other best practices of the teaching profession. Teachers within a professional learning culture engage in continual conversations surrounding best teaching practices and new instructional teaching strategies; these establish professional teaching standards among professionals. Fleming and Kleinhenz stated that the frequency and quality of professional conversations significantly influence the quality of pedagogy in school culture. Therefore, teachers within a professional learning culture collaboratively reflect on teaching practices, thereby creating powerful learning cultures. These teaching practices support the development of professional knowledge and professional skills.

The establishment of professional teaching standards support teachers within a professional learning culture (Fleming & Kleinhenz, 2007). Established through professional dialogue, these standards provide a tool for professional self-measurement; professional teaching standards also promote a high level of professional practice while supporting autonomous growth (Harris, (2008). A professional learning culture creates the capacity to evaluate practices and to implement professional accountability. In their quantitative research involving 62 participants, Hickey and Harris (2005) stated that “the pedagogy and professional responsibility standards include the need to work and share with other professionals” (p. 13). Professional standards are

the foundation from which teachers and their associations can lead. Their study used a practitioner research model and found that teachers no longer see teaching as only a personal style; rather, they view it as a profession apt to engage student learning. Yes, teachers must meet and embrace standards, but professionals recognize that, on the contrary, individual styles and innovations are part of professional conversations that help to meet these standards.

To understand teacher beliefs in professional learning cultures, it is important to examine teacher actions (Angelle & DeHart, 2011). Seven hundred and fifty participants informed Angelle and DeHart's quantitative survey, and the data identified teachers as being isolated within their own classrooms. Providing opportunities for "all to lead" (p. 155) engages teachers in professional learning cultures, which allow professional learning cultures to flourish. It remains unclear from their research, though, how to engage all teachers in meaningful professional learning cultures when they gather with varying professional needs.

Further, in acknowledging the various professional needs of teachers, Glickman's classification of teachers can guide the development of professional learning cultures. In addition to Angelle and DeHart's (2011) work examining teacher behaviors, Glickman (2002) described four "types" of teachers: Teacher Dropouts, Unfocused Workers, Analytical Observers, and Professionals (p. 88). Using levels of commitment and levels of abstraction as variables, Glickman qualified each type of teacher into four quadrants. Quadrant One represented Teacher Dropouts as having both low levels of commitment and low levels of abstraction. They view the learning community as needing help, but do not view themselves as needing help. Quadrant Two represented Unfocused Workers who, with much enthusiasm and good intentions, cannot actuate improvements because of their inability to think through problems. The third quadrant, Analytical Observers consists of highly intellectual people who can articulate problems and

identify steps to overcome the noted challenges. Analytical Observers, however, are unwilling to commit the time, energy and/or care necessary to actualize solutions. Quadrant Four describes Professionals as teachers committed to continually improving themselves, their students, and their fellow teachers. They provide ideas, activities, and resources, and others regard them as informal leaders. These teachers are both thinkers and doers with high levels of commitment and high levels of abstraction. With such diversity among teachers, an environment for a professional learning culture can support all four-teacher types. Glickman's four types of teachers offers a helpful map for understanding teacher behaviours. Professional needs of a professional learning culture will vary based on the types of teachers within the culture. Limitations to this research include the lack of explanation as to the motivations leading to various teacher behaviours. Deserving of further research is why teachers have varying levels of commitment and levels of abstraction.

According to the research of Celik (2010), Flemming and Kleinhenz (2007), Angelle and DeHart (2011), and Glickman (2002), professional learning culture functions through collaborative conversations and actions formed by teachers' complex knowledge and skills. The next section will examine literature on distributed leadership as experienced in professional learning cultures.

Distributed Leadership as Teacher-leadership

When the study of teacher-leadership emerged in the 1990s (Smylie & Denny, 1990), researchers defined distributed leadership and teacher-leadership separately (Harris, 2008). More recent research, however, indicates that distributed leadership and teacher-leadership are inextricably linked (Leithwood, Mascal, & Strauss, 2009). In his article highlighting the significance of distributed leadership systems, Gronn (2002) described the phenomenon of

distributed leadership as being “present in the flow of activities in which a set of organization members find themselves enmeshed” (p. 331). Distributed leadership, according to Leithwood et al.’s (2009) empirical research, is realized through the combination of a collaborative professional learning culture and a flattened bureaucratic structure. As a result, recognized through the framework of distributed leadership is teacher-leadership.

Distributed Leadership Defined

Some researchers defined distributed leadership as an “ambiguous and consuming concept” (Hulpia, Devos, & Van Keer, 2009, p. 47), and it combined collaboration, multiple and complementary strengths and expertise, and shared vision (Woods, Bennett, Harvey, & Wise, 2004). Within the paradigm of organizational leadership, Gronn’s (2002) peer-reviewed article described distributed leadership as a “distribution of labor” (p. 333). Distributed leadership defines a way of thinking about the practice of school leadership within the context of leadership tasks and interactions (Gronn, 2002; Spillane, Halverson, & Diamond, 2004); when paired with a formal leadership structure, it can flourish into a powerful tool supporting successful innovations of leadership activity.

Distributed leadership within schools is understood as the distribution of leadership practices through the flexible roles of leader and follower (Gronn, 2002; Harris, 2008). It is, therefore, of value to examine teacher-leadership as it exists within the framework of distributed leadership.

Teacher-leadership Defined

In her peer-reviewed article, Harris (2003) defined teacher-leadership as a “dynamic organizational entity” (p. 33) wherein teachers’ collective actions develop relationships and connections among individuals within the school, regardless of their roles. Specifically,

established through interactions “as they influence instructional practice” (p.33) is teacher-leadership. Katzenmeyer and Moller (2009) articulated teacher-leadership as leading “within and beyond the classroom; identifying with and contributing to a community of teacher learners and leaders; influencing others toward improved educational practice” and “accepting responsibility for achieving the outcomes of their leadership” (p.6). Harris believed leadership is socially constructed and remains culturally sensitive, with a critical part of leadership practice being interactions (2008, 2012). In her book, Lambert (1998) articulated teacher-leadership as follows:

Leadership is about learning together and constructing meaning and knowledge collectively and collaboratively. It involves opportunities to surface and mediate perceptions, values, beliefs, information and assumptions through continuing conversations; to inquire about and generate ideas together; to seek to reflect upon and make sense of work in the light of shared beliefs and new information; and to create actions that grow out of these new understandings. Such is the core of leadership. (p. 5-6)

Lambert identified the creation of new professional knowledge among teachers as being required to create leadership within a school culture.

Some researchers defined teacher-leadership by the context in which it is experienced, such as through relationships, community, learning paradigm or purpose (Angelle & DeHart, 2011; Lambert, 2003). Lieberman and Miller (2011) suggested that teacher-leadership continually develops and adapts to the needs within schools. Acknowledging the context in which teacher-leadership exists allows leadership to advance within school culture.

As a result of the research of Katzenmeyer and Moller (2009), Lambert (1998, 2003), and

Lieberman and Miller (2011), teacher-leadership is understood as that which is experienced through collective actions of a group of teachers who build communities through shared instructional purposes. An understanding of how teacher-leadership functions within the context of a school will advance the understanding of the concept of teacher-leadership.

How Teacher-leadership Functions

In their empirical study of six American high schools, Louis et al. (2006) researched how teacher-leadership functions within the framework of distributed leadership. They looked at how the various organizational factors influence the design of teacher-leadership. Teacher-leadership functions both as a key component of educational organizations in its own right and as a “catalyst for the successful reorganization of other activities” (Dimmock, 2003, p. 4). With ever-changing societal needs, schools of the future are more likely to “require multiple rather than individual leaders” (Harris, 2008, p. 15). Abandoning organizational structures and sole responsibility for leadership associated with the traditional heroic leader opens the opportunity for multiple teacher-leaders. It is important to understand how teachers participate in teacher-leadership within a collaborative school culture; sharing teacher-leadership within a professional learning culture enables the organization to adapt and meet societal demands of the school.

In her article examining the concept of teacher-leadership, Harris (2003) believed learning together and constructing professional knowledge in a collaborative environment creates leadership potential among all teaching professionals. In their analysis of educational literature, Leithwood et al (2009) noted that when teacher-leadership is intuitive, it is embedded in the culture of the school. Daily social interactions between school leaders and school members shape the process of teacher-leadership (Spillane, Camburn, Pustejovsky, Pareja, & Lewis, 2008), suggesting it would be difficult to predict how effective teacher-leadership might be, for it

relies on the quality of teacher interactions. Teacher-leadership is effective when teachers' daily professional interactions keep them sensitive to various indicated needs in both school and students (Harris, 2003). Implied in the analysis is the ability to measure components that in turn created a better understanding of influences on teacher-leadership. Teacher-leadership functions through co-created professional knowledge; therefore, it is challenging to predict how successful teacher-leadership can be in each school culture.

A product of teacher-leadership is the ability to encourage colleagues to change practices and the willingness to "lead beyond the classroom and contribute to the community of learners" (Katzenmeyer & Moller, 2009, p. 17). Teacher-leadership develops multiple leaders (Harris 2003), creates professional autonomy (Katzenmeyer & Moller), and encourages collaboration. With the possibility of all teachers contributing to leadership, teacher-leadership creates interdependency and a sharing of responsibility for instructional change (Angelle & DeHart, 2011). Teacher-leadership also creates autonomy among teachers, permitting them to apply and to adapt "new knowledge and skill in the classroom" (Smylie & Denny, 1990, p. 236). Teacher-leadership, therefore, has the potential to support a diverse professional learning culture.

Teacher-leadership is an expansive topic explored in educational literature, both qualitatively and quantitatively. It involves multiple leaders (Harris 2008), is experienced through the framework of distributed leadership (Louis, Mayrowetz, Smiley, & Murphy, 2009), and is embedded within the culture (Leithwood et al., 2009). An overview the roles experienced in teacher-leadership follows.

Gender and Age as Factors in Educational Leadership

Gender as a factor in educational leadership has largely been dealt with silence and unawareness (Killingsworth, Cabezas, Kensler, & Brooks, 2010). In their qualitative study

involving three in-depth interviews of educational leaders, Killingsworth et al. recognized gender as a legitimate category of analysis. They also emphasized the importance of the difference of experiences between genders. Highlighted in their research was the belief that there was a male epistemological hegemony because of the exclusion of women's experiences in leadership. Killingsworth et al. concluded purposeful facilitation of discussions of gender issues could increase a broader understanding of educational leadership in its current practice.

In her quantitative study of 93 members of humanities departments from the University of Mysore, India, Tabbodi (2009) identified gender as an important variable in her research. In studying the effects of leadership behavior on faculty commitment, she proved a positive relationship between commitment behavior and two variables: age and gender. What the study lacked was a way of measuring why a significant variance between male and female commitment behaviors existed. Important to note is the significant differences revealed between the variables of age and gender. Therefore, when researching in the field of educational leadership, age and gender are significant factors to consider.

Educational Attainment as a Factor of Educational Leadership

The perusal of academic advancement significantly impacted a principal's ability to enhance his or her professional skills and knowledge base (Rodriguez-Campos, Rincones-Gomez, & Shen, 2005). In their longitudinal survey, Rodriguez-Campos et al. found the level to which principals attained advanced academic degrees influenced their ability to function as educational leaders. Their study did not focus on perceptions according to the variable of educational attainment. The significance of the educational attainment variable, however, was substantial enough to apply to other areas of educational leadership.

Experience influences the level to which teachers engage in collaboration (Usher &

Pajares, 2008). In their review of 27 studies on sources of self-efficacy in schools, Usher and Pajares examined contextual factors such as gender, ethnicity, and academic ability as sources of influence on self-efficacy. While the research of Usher and Pajares focused on student self-efficacy, one can apply their research to teachers as learners in a school culture. Their social-cognitive approach considers teacher as learner; therefore, gender and academic ability influences the level to which teachers engage in collaboration. Consequently, research that focuses on situational contexts such as gender and academic ability can be insightful when examining teacher-leadership.

Teacher-leader roles

Teacher-leadership roles are as diverse as their contexts (Muijs & Harris, 2003). A lack of explicit descriptions of teacher-leadership prompted researchers to qualify teacher-leader roles (Angelle & DeHart, 2011; Lieberman & Miller, 2011; Muijs & Harris, 2003). What follows is a review of literature concerning the definition of teacher-leader roles.

Teacher-leader roles Defined

Defining the role of teacher-leaders is challenging because of the multiple relationships involved in teacher leadership (Leithwood et al., 2009). Several scholars identified specific teacher-leader roles including administrator, department chair, teacher-leader, peer-coach, staff developer, master teacher, and mentor (Angelle & DeHart, 2011; Katzenmeyer & Moller, 2009; Leithwood et al., 1999; Lieberman & Miller, 2011; Muijs & Harris, 2003). Within these roles, four main functions of teacher-leadership include these: (a) an educational role model who shares professional knowledge, (b) a decision maker who bases decisions on best practices, (c) a visionary who sees the bigger picture, and (d) a change leader who uses relationships to bring about change (Angelle & DeHart, 2011; Harris, 2003). In school settings, teacher-leadership has

many different roles.

As a result of their research, Lieberman and Miller (2011) identified three new possible roles of teacher-leadership. First, “teacher as researcher” (p. 29) allows for new knowledge acquired both from practice and reflection, rather than simply by observation and interpretation. For a teacher as researcher, both process and results lead to improvement in classrooms and possibly the entire school. For a reflective practitioner, inquiry is a critical component of teacher learning. “Teacher as scholar” (p.29) is the second role identified by Lieberman and Miller. When teachers study their own practices and make them public to others, they “felt far more efficacious about their teaching and they approached their peers in substantially different ways” (p. 29). The expertise, credibility, and influence of a teacher-leader promote learning-in-practice for all teachers. Third, “teacher as mentor or coach ... allows teachers to make their work public and to assist in the reconstruction of the profession” (p. 31). As a result, mentors prepare teachers within the professional learning community for the organizational realities affecting neophyte teachers. Mentors also assist neophyte teachers learn their new roles as members of “communities of practice” (30). Above all, teacher-leaders must be knowledgeable, well versed, and collegial in sharing their skills with other teachers. Analysing how new teacher-leader roles are enacted lead to new conceptions of the role.

Influences on the Teacher-leader Role

Teacher-leader roles evolve from the unique contexts within each school. In addition, strengths of individual teacher-leaders bring new skills to the role of teacher-leadership. When expanded leadership roles emerge within schools, multiple sources of “influence and agency” (Harris, 2012, p. 8) of distributed leadership are recognized. Born out of necessity, teacher-leadership roles naturally develop based on the unique instructional needs of a school (York-Barr

& Duke, 2004). Facilitating teacher-leader roles requires a change from top-down authority to one of distributed autonomy and accountability (Muijs & Harris, 2003). What follows is a review of five aspects, derived from educational research, influencing teacher-leader roles.

School culture ready for change. A flexible organizational paradigm that disperses leadership creates opportunities for teacher-leader roles to exist. Katzenmeyer and Moller (2009) stated creating sustainable leadership requires the principal to respond to change, build community, collaborate, and overcome obstacles. When power is shared, it is an “attribute that moves from person to person” (2009, p. 29). For these researchers, an organization’s capacity for learning and teaching recognizes a teacher’s autonomy within a school culture while maintaining a “unified approach to student learning and quality professional learning” (p. 26). Implications for a school’s developing teacher-leaders are to ensure the school culture is apt for distributing leadership to more teachers.

Active involvement of individuals at all levels in an organization is necessary to implement and to sustain change; involving teachers in decision-making empowers teachers (Katzenmeyer & Moller, 2009). A school leader’s ability to relinquish hierarchy control empowers teachers to lead from within the classroom and fosters teacher-leadership. A change from a hierarchical school organizational structure to one that is collaborative supports teacher-leadership (Angelle & DeHart, 2011). According to Harris (2008), relinquishing authority and adopting a different conception of the organization moves one away from a bureaucratic to a collaborative school culture and facilitates teacher-leadership. In addition, Harris noted that when a group of professionals determined to seek new ways of bettering their craft, their decisions had a positive impact on the level of teacher self-efficacy and motivation. Purposefully created conditions that include teachers in leadership foster the development and

the active cultivation of individual teacher-leaders who act to strengthen the school organization (Harris, 2003). Thus, a school culture poised to engage teachers and administrators throughout the organization is most effective in motivating change.

New teacher-leader roles are sustained through flexible school structures and by a culture of active facilitation (Harris, 2008). Harris noted that leadership activities undertaken both laterally and vertically respond to fluctuating changes of the school organization. Trends to flatten structural matrices in educational organizations sustain school leaders. New teacher-leader roles focus on the “interactions between different leaders of various types and at various levels within the school” (p.40). The ability of teacher-leaders to react to differing contexts through a flexible structure proves most powerful. As a result, a need exists for leadership to set a vision that involves and encourages teacher-leaders within the school. There remains a need to maintain vertical teacher-leader roles to guide and to focus the professional learning culture when increasing lateral teacher-leader roles.

Growth of professional learning cultures. Katzenmeyer and Moller’s (2009) research on teacher-leaders emphasized that regardless of the context, teacher-leaders “expand their spheres of influence by focusing attention on growth and development of not only themselves but also others in their schools” (p.67). Accordingly, a teacher-leader influences the growth of a professional learning culture. Effective teacher-leaders “model behaviours of a continuous learner” (p.67) and engage others in shared vision and meaning. A teacher-leader’s effectiveness lies in his or her ability to work with a diverse group of teachers and to use the “strengths of these differences when leading” (p.67). Dealing with resistant colleagues is therefore a component of working in a professional learning community; the manner in which a teacher-leader addresses a difficult colleague is reflective of his or her ability to lead. Consequently,

when selecting a teacher-leader, administrators would find it advantageous to seek one who actively engages all members of the professional learning culture.

Through their research, Lieberman and Miller (2011) found that fulfilling the teacher-leader role requires teachers to build skill and confidence in other teachers. Teacher-leaders acknowledging the social realities of teaching within a school culture can effect change by working with colleagues in creating professional learning cultures. Commonly, teachers teach in isolation; a teacher-leader's skills must include the ability to give other teachers support in their classrooms and to develop and create knowledge together. Lieberman and Miller recognized that the shift to a collaborative school culture accommodates the development of increasingly new teacher-leader roles. Schools seeking to support teacher-leaders are wise to establish professional learning cultures that develop new professional skills among colleagues. That common knowledge will create a social network capable of supporting teachers and give each teacher an opportunity to lead.

Building relationships. Effective teacher-leaders incorporate relationship-building in their activities. Throughout their multisite quantitative study, Angelle and DeHart (2011) noted the importance of establishing relationships among teachers as a key element in creating roles for effective teacher-leadership. Creating a “network of support for teacher-leaders” (p.156) informs potential teacher-leaders as to one's role within school-wide leadership. Consequently, the more informed teachers are, the more capable they are in fulfilling the roles of teacher-leaders. Angelle and DeHart noted that when relationships developed within professional learning cultures, teachers strove to lead beyond the classroom. Formed through interactions are teachers' perceptions; as a result, relationship building is highly important to the support of

effective teacher-leader roles.

Lambert's (1998) Leadership Capacity Matrix (LCM), figure 1, exemplifies the sophisticated and complex nature of building teacher-leadership relationships. A quadrant one leader, with low participation and low skillfulness, characterizes autocratic administration and produces a limited flow of information. Co-dependent and paternal relationships are present with rigidly defined roles. The school culture typically present norms of compliance and lack of innovation in teaching and learning. In addition, student achievement is poor or perhaps shows only short-term improvement. A quadrant two leader, with high participation and low skillfulness, typifies a laissez-faire teacher-leader who lacks coherence of information and who has fragmented programs. Within a laissez-faire teacher-leader's classroom is found undefined roles and responsibilities, and norms of individualism are evidenced in either an excellent or a poor classroom. Innovation is limited and student achievement is overall static. A quadrant three leader, with high skillfulness and low participation, has trained leadership or a site-based management team with limited uses of school-wide data or information flow within designated leadership groups. A polarized staff and pockets of strong resistance are present. Designated leaders act efficiently, while others serve in traditional roles. With pockets of strong innovation and excellent classrooms, school-wide student achievement is static or shows slight improvement. A quadrant four leader, with high skillfulness and high participation, exemplifies broad-based, skillful participation in the work of leadership. Lambert suggested that the use of inquiry-based information play a part in decision-making and practices regarding professional knowledge. Lambert's four leader types describe professional relationships that influence a teacher-leader's ability to form effective relationships. Schools seeking to establish teacher-leader roles ought to consider a teacher's ability to forge positive relationships with numerous

colleagues as well as their breadth of professional knowledge.

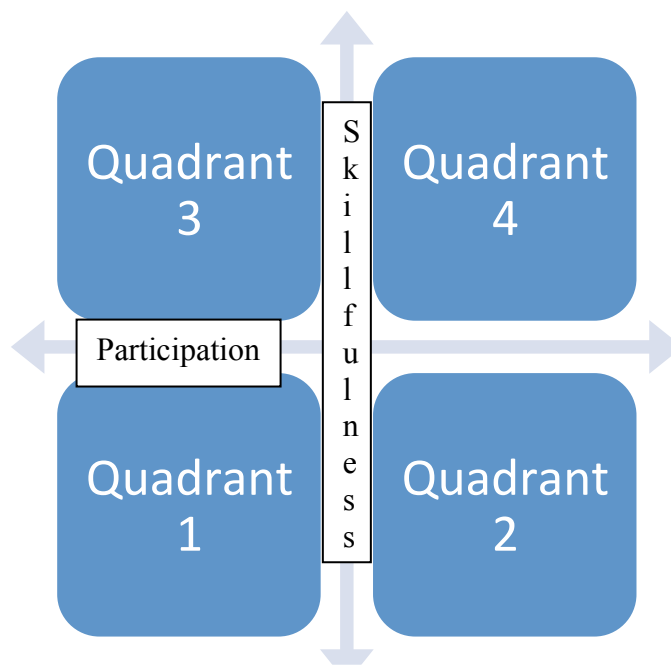


Figure 1. Leadership Capacity Matrix. Adapted from “Building leadership capacity in schools” by L. Lambert, 1998. Copyright 1998 by

Teacher-leadership exists within a social context (Harris, 2008), and the ability to fulfil teachers’ role within a school is dependent on their capacity to build relationships with colleagues. To successfully establish collegial relationships, quality time is required to interact and to collaborate with colleagues (Angelle & DeHart, 2011; Harris, 2012; Vernon-Dotson & Floyd, 2012). In their qualitative case study, Vernon-Dotson and Floyd’s (2012) participants saw teacher-leaders as having the ability to forge a sense of community and to share a commitment for increased student achievement. According to Vernon-Dotson and Floyd’s case study, participants who were engaged in leadership teams built the strongest capacity to lead, for they felt empowered to effect change within their school. The ability to contribute to change within their schools increased feelings of self-efficacy. As members of a leadership team, they engaged in additional leadership responsibilities both within the school and throughout their district. Given time and resources to address the detailed needs of a school, teacher-leaders were

empowered to fulfill the instructional needs of a professional learning culture. Hence, teacher-leaders must have adequate time and financial resources to establish these relationships; the effectiveness of the teacher-leader role is dependent on the capacity to forge relationships within the social context of schools.

Flemming and Kleinhenz (2007) as well as Angelle and DeHart (2011) saw that teacher-leaders were identified by their peers as people of passion, determination, expertise and vision, all qualities that determine teacher-leaders' credibility among peers. As a result, a collaborative environment of leadership results when teacher-leaders ignite the passion of others. Findings from Angelle and DeHart's study revealed how teachers' willingness to "share their expertise with peers is essential to ongoing collaboration and nurturing leadership skills" (p.156). It is important to understand how peers view their teacher-leader colleagues, for it impacts on the effectiveness of the teacher-leader role. For this reason, it is valuable to research how peers identify teacher-leadership.

Building trust. Teacher-leaders who have the trust of their colleagues are more effective leaders. Harris (2008) described leadership as constructed by interactions within a network of a complex set of social processes. Thus, it is important to examine the role that trust plays in relationships when building teacher-leadership capacity. Trust, within a professional learning culture, allows for teacher autonomy (Woods et al., 2004), and all members of the professional learning culture benefit (Gronn, 2002). A teaching culture that values inquiry and trust provides teachers with autonomy to pursue improved teaching strategies; this quality is built upon trust rather than on regulations (Woods et al., 2004). Trust fosters teacher-leader roles by establishing a culture of safety for risk-taking within the profession. Prompted by a sense of trust, professional teachers who expect neither recognition, nor compensation develop organizational

citizenship (Louis et al., 2009). Trust in leadership positively effects significant change within schools in terms of productivity and performance (Harris, 2008; Louis et al, 2009); it promotes cooperation that Louis identified as a core element in engaging significant changes in leadership patterns in schools. Louis found trust “enhances support for, co-operations with, and desire for interactions with superiors, and enhances confidence” (p. 162). Trust frames a strong collaborative environment and is, therefore, critical for teacher-leader roles to exist.

MacBeath and Dempster (2009) asserted as well that distributed leadership is based on trust and counterpointed with the imperative of accountability. Trust is “maintained through honest sharing of information” (p.99) and “enables distributed leadership practice to develop” (p.125). Linked in providing a framework for inter-accountability is trust and professional accountability, which in turn gives teachers the tools they need to achieve distributed leadership. Overall, open and honest professional dialogue within a culture of shared values supports teacher-leaders.

Professional learning. Katzenmeyer and Moller (2009) proposed a leadership development model for teachers that “[provides] a framework for professional learning beyond competency in teaching skills” (p. 58). They have advocated collaborative leaders first understand themselves, then their colleagues, and finally, their schools. Teacher-leadership functions through four broad components: (a) personal assessment, (b) changing school contexts, (c) influencing strategies, and (d) planning for action. The first, personal assessment, has the teacher ask the question “Who am I?” within his or her educational context. Leaders who seek feedback and who collected data about themselves are better able to understand “how they are perceived by their colleagues” (p. 59). The second component, changing school contexts, asks the question “Where am I?” Teachers with a larger perspective of the context within which they

lead are better equipped to think about school change and the larger contextual changes of the school division, province, or nation. The third component, influencing others, is a skill teachers develop by asking, “How do I lead others?” Acknowledging that leading is not a state of knowing all things enables teacher-leaders to acknowledge differences, disclose their own perspectives and seek to understand and to use the perspectives of others. The last component, planning for action, asks the question “What can I do?” Engaging participants to apply their own leadership skills encourages leaders to set goals and to determine strategies for making change valuable. As a result, teacher-leader roles would be well suited to teachers who are pedagogical experts as well as self-reflective practitioners.

As well, educational research addresses factors that influence teacher-leader roles. These factors include the establishment of school culture ready for change, the development of relationships, and the trust among teachers and a teacher-leaders’ self-reflection, all essential elements of teacher-leader roles. Recognizing the influences on teacher-leader roles, the following section presents literature on the topic of teachers’ perceptions of teacher-leadership.

Principals as Teacher-Leaders in Saskatchewan

According to Saskatchewan’s *Education Act* of 1995, the duties of a principal include the supervision of the school’s professional staff and exercising leadership in co-operation with the Director. Unique to Saskatchewan is the responsibility of a Saskatchewan principal to work in cooperation with staff; principals and teachers within the school are members of the same professional organization: the Saskatchewan Teachers Federation. As such, principals provide leadership to teacher colleagues.

Teachers’ Perceptions of Teacher-leadership

Educational literature has a breadth of research on the topic of teacher-leadership.

Researchers (Angelle & DeHart, 2011; Hulpia et al., 2009; Jarrett, Wasonga, & Murphy, 2010) have highlighted the importance of examining teacher-leadership through the perceptions of their peers. It is, therefore, important to examine teachers' perceptions of teacher-leadership within school organizations. The following is a review of the literature on the topic of teachers' perceptions of teacher-leadership.

Teachers' perceptions of teacher-leadership are an important variable in understanding teacher-leadership interactions. Interactions among teachers provide opportunities for teacher-leaders to mediate perceptions, values, and beliefs through continued conversations (Firestone & Martinez, 2009; Harris, 2012). Hulpia et al.'s (2009) quantitative study revealed that teachers' organizational commitment is predicted by their perceptions concerning "the cooperation of the leadership team and the maximum amount of support" (p. 46). Moreover, they recognized that the capacity for teacher-leadership emerges from a group of interacting individuals. Through social interactions and interrelationships, both integral parts of leadership activity, teacher-leadership is shaped. Consequently, significant are the variables of teachers' perceptions of leadership such as organizational commitment and the amount to which teachers feel supported by their leadership team.

A teacher's perceptions of leadership have a direct impact on school cultures, thus affecting a teacher-leader's efficacy. The study by Jarret (2010) employed a quantitative method to compare the levels of the practice of co-creating leadership dispositional values and institutional conditions that facilitate the practice of co-creating leadership between high- and low-performing high schools. The collected data, via a survey, was analyzed using descriptive statistics. According to Jarret, strong correlations existed between the predictive powers of perceptions on school culture and dispositional values. He noted leadership models should focus

both on human values and on organizational conditions. In using an organization's optimal human potential, a re-envisioned leadership model supports egalitarian conceptions of democracy. It also engages all teachers in developing "self and thus evolving power" (p. 638). Respondents to Jarret's (2010) survey advocated dispositional values such as collaboration, active listening, cultural anthropology, egalitarianism, patience, humility, trust, and resilience as important perceptions in developing leadership. In addition, deep democratic organizational conditions, quality relations, and evolving power strengthen a school's capacity to engage in and to build a capacity for teacher-leadership. In Jarret's study, teachers with strong "correlations between their dispositional values and institutional conditions" (p. 650) facilitate co-creating leadership. Accordingly, a teacher-leader's ability to function effectively is dependent upon his or her colleagues' perceptions of the teacher-leader role.

Angelle and DeHart found a significant difference between elementary teachers and high school teachers in their perceptions of sharing expertise and supra-practitioner factors. They also noted differences between degree level, when responding to the factors SP and SE. Respondents with a Bachelor degree scored SP and SE as highly indicative of teacher-leadership as compared to respondents with a Master's degree. The variance in responses according to degree level indicates that opportunities for neophyte teachers to collaborate with experienced teachers are critical. The previously mentioned research gives prominence to quantitative data about teachers' perceptions of teacher-leadership, which to this point has been lacking in educational research. As a result, teacher-leadership cannot occur the same way in every school. A teacher's degree level and experience influence the unique composition of a professional learning culture. Therefore, it is of great value to appreciate the differences of teachers' perceptions of teacher-leadership.

Emerging literature on the topic of teachers' perceptions of teacher-leadership shows the importance of teachers' understandings of teacher-leaders. Engaging and acknowledging stakeholders' perceptions of teacher-leadership are valuable in developing leadership. Personal experience of leadership influences teachers' perceptions of teacher-leadership. With a noted lack of research in the area of perceptions of teachers regarding teacher-leadership, further data should be collected to examine the relationship between independent variables and teacher-leadership (Angelle & DeHart, 2011; Hulpia et al., 2009). Further, teachers' perceptions of teacher-leadership are an important variable in the creation of teacher-leadership. Teachers' perceptions of teacher-leadership differ based on a teacher's degree and his or her years of teaching. Therefore, it is important to understand how teachers' perceptions evolve over time.

Changes in Teacher Perception of Teacher-leadership

A review of the literature reveals teachers' perceptions of teacher-leadership evolve over time. Professional dialogue (Lambert, 1998), personal experiences (Angelle & DeHart, 2011), and the context in which teacher-leadership exists (Katzenmeyer & Moller, 2009) influence the evolution of teachers' perceptions of teacher-leadership.

As schools change to meet the unique needs of students, teacher-leaders' perceptions of their roles evolve as they assume different responsibilities within the school (Lambert, 1998). Lambert believed that all educators have the right, responsibility, and ability to lead; the actions of participants define leadership that is ideally purposeful and professional. Teachers assuming new roles and acquiring new professional knowledge shape teachers' perceptions of teacher-leadership. Therefore, as teachers engage in leadership, their actions demonstrate their professional growth and development. As more teachers engage in leadership, no longer is there a one-person leadership role; rather, leadership evolves into a collaborative effort recognizing the

substantial talents of all members of the professional school culture. Consequently, as teachers assume different leadership responsibilities, their own understanding of the teacher-leader role evolves.

In a longitudinal case study of one urban school, Lambert (1998) noted a change in focus of staff members over a two-year period. The professional development initiative developed by the teachers focused on increasing professional dialogue and on reflecting in a collaborative manner. The capacity to dialogue openly resulted in staff members acquiring a broader understanding of the school context. Throughout this process, teachers' perceptions expanded from an isolated classroom perspective to a broader awareness of the challenges facing the entire school. Initially, teachers focused solely on the bureaucratic functions of their school. As they began, however, to focus their professional dialogues on instructional strategies for the improvement of student learning, teachers' professional knowledge expanded. And, as their knowledge developed, the scope of teachers' professional roles also expanded to include instructional goals. The evolution of staff members' focus to include instructional goals emphasizes the importance of quality professional dialogue and how it can guide the transformation of perspectives. Thus, high quality professional conversations influence teachers' perceptions of teacher-leadership. Through continual professional conversations, new knowledge emerges within the professional learning culture.

Further, as teachers gain a variety of professional experiences, changes develop in perceptions of teacher-leadership. In their quantitative study, Angelle and DeHart (2011) found teacher-leadership was "perceived differently by teachers" (p. 155) according to their experience, their degree level, and their leadership position within the school. Moreover, Katzenmeyer and Moller (2009) acknowledged teachers' educational philosophies as elements influenced by "their

past and the context in which they live” (p.71). Therefore, changes in perception occur as teachers gain different experiences and insight throughout their teaching careers. Teachers of differing generations - from baby boomers to Generation Y - have “differing values, beliefs and perspectives” (p.71) about teaching. These differing perceptions present unique challenges in building collaborative professional-learning communities. Finally, acknowledging changes in teachers’ perceptions of teacher-leadership is crucial for the role to succeed.

Summary

Educational literature presents expansive research examining how teachers function within the role of teacher-leader. Examined in a range of studies are teacher-leader roles in relation to school culture, to professional learning communities, and to distributed leadership. Within each unique context, teachers experience teacher-leadership through a variety of teacher-leader roles. Agreement exists in the literature that numerous factors influence teacher-leadership.

The literature highlights external factors that influence teacher-leadership. Angelle and DeHart (2011) noted how teachers’ perceptions of teacher-leadership dramatically affect the success of the teacher-leader role. Relationships within professional-learning cultures, therefore, shape teacher-leaders’ effectiveness. The relevant literature focuses on external factors facilitating teacher-leader success through the framework of distributed leadership. Beginning to emerge in research is the investigation of teacher perceptions of teacher-leadership and its influences on the success of such leadership. Minimally considered in the quantitative research, though, are the factors influencing teachers’ perceptions of their peers in positions of teacher-leadership.

In light of all the relevant research presented, one must note the lack of quantitative

research. It is useful to examine the processes of teacher-leadership through not only a qualitative lens, but also a quantitative perspective. Through a quantitative analysis of teacher perceptions of teacher-leadership, this research seeks to produce an increased awareness about facilitating teacher-leadership within the context of school culture.

Conceptual Framework

The degree to which teachers' perceptions of teacher-leadership are impacted depends on their experiences, their degree levels attained, and whether the teachers hold leadership positions at the school (Angelle & DeHart, 2011). Angelle and Schmidt's (2007) qualitative study delineated four factors of teachers' perceptions of teacher-leadership: (a) sharing expertise (SE), (b) sharing leadership (SL), (c) supra-practitioner (SP), and (d) principal selection (PS). An operational definition of the four factors provides an understanding of the Teacher-Leadership Inventory (TLI). These four factors created a construct of teacher-leadership.

The first factor of sharing expertise (SE) is the ability of teacher-leaders to share professional pedagogical knowledge with their peers through collaboration and shared practice. Interesting to note is the ability of the items to measure not only the perceptions of teacher-leader skills, but also the willingness to share these skills and knowledge with their colleagues (Angelle & DeHart, 2011). The depth of the factor SE allows researchers a clearer understanding of the influence this factor has on teachers' perceptions.

Sharing leadership (SL), the second factor of Angelle and Schmidt's 2007 qualitative study, highlights the "willingness of the principal to share leadership and the willingness of the teacher to accept the challenge to lead" (Angelle & DeHart, 2011, p. 149). The mutuality of leadership in a school includes the willingness of the principal to share leadership and the willingness of teachers to engage in leadership opportunities. Within the SL factor are two

subsets *Leadership Opportunity* and *Leadership Engagement*; these subsets acknowledge an ongoing relationship concerning leadership between administration and the teaching staff. The first subset focuses on the principal's beliefs concerning providing opportunities for teachers to participate in leadership activities. The second subset includes items that indicate how teachers engage in the leadership activities. Because of the give-and-take relationships of the two subsets, Angelle and DeHart gave them the categorical name SL. According to Angelle and DeHart, officials ideally will provide teacher-leadership opportunities within the school context for all teachers.

The third factor, supra-practitioner (SP), is teachers' perceptions of the extent of teacher-leadership in schools. SP "measures perceptions of teacher behaviours beyond prescribed roles" (p.149) and measures the willingness of a staff to engage in additional professional activities. Teachers who are happy to arrive early and stay late for the benefit of administration, colleagues, and students and who show that they undertake extra duties beyond the school day are teacher-leaders identified by this factor. Therefore, the SP demonstrates a desire to engage in meaningful leadership activities. Their colleagues view their engagement and see it as a characteristic of teacher-leadership.

The fourth factor, PS, highlights principals who create a climate of collaboration and trust within a large group of teachers. Items within this factor identify whether or not the principal creates in-groups that in turn create demoralizing out-groups among the teachers. Angelle and DeHart (2011) noted that the we/they mentality represents a significant barrier to the success of teacher-leadership in a school. In-groups established by the principal damage the climate of collaboration and trust built with teachers.

Angelle and DeHart's (2011) conceptual framework for the Teacher-Leadership

Inventory (TLI) shapes my proposed study of high school Teachers' Perceptions of Teacher-leadership. From their research, one can analyse and examine the data to find similarities, differences, and new questions to pose.

CHAPTER 3

Research Design and Methodology

Described in this chapter are philosophical assumptions, rationale for the research design, and research context. In addition, outlined are the processes for data collection, data analysis, and ethical considerations.

Philosophical Assumptions

Muijs (2011) expressed epistemologies as the differing paradigms “underlying philosophies and world views of researchers” (p. 3); the two paradigms are quantitative and qualitative. Quantitative research is described as being realistic or positivist, while qualitative research is described as being subjective. A realist’s goal in research is to use objective research methods to uncover the truth to which it exists. To do so, the researcher must detach from the research as much as possible, while employing “methods that maximize objectivity and minimize the involvement of the researcher in the research” (Muijs, 2011, p. 3). These goals are accomplished by developing reliable measurement instruments to study the reality of a phenomenon. Subjectivists as qualitative researchers acknowledge the role of human subjectivity in the process of research. As such, “there is no pre-existing objective reality that can be observed” (Muijs, 2011, p.4), since the process of observing reality changes it. Therefore, truth can be relative but never definitive.

The philosophical stance underlying the methodology of this study is one of post-positivism, where the researcher accepts that one simply cannot observe reality as a totally objective and disinterested outsider. Post-positivists hold deterministic philosophies, the view that causes determine outcomes. As such, post-positivists identify and assess the causes that influence outcomes. In reducing ideas into small testable sets of ideas and variables, they build

research questions. Through a post-positivist lens, a researcher carefully observes and measures the objective reality that exists in the world. Numerical measurements of observations and studying the behaviours are key components of a post-positivist researcher (Creswell, 2009).

Unique to this study, as compared to other studies of teacher-leadership, is the use of an instrument to measure perceptions of a socially constructed reality.

Research Design and Rationale

The epistemological foundation that informs this research is quantitative. Quantitative research, as defined by Muijs (2011), is “about collecting numerical data to explain a particular phenomenon” (p. 2). Quantitative research, however, is not simply about mathematics; it is about choosing the appropriate research design and data-collection instrument. Therefore, the researcher must pay close attention to selecting a research design (Frankel & Wallen, 2006). The proper design of research investigations can lead to accurate conclusions about teachers’ perceptions of teacher-leadership.

Quantitative research relies on the assumption that a reality exists out there waiting to be discovered, a reality independent of us. (Frankel & Wallen, 2006). Using empirical measurements, post-positivists search for causes that determine outcomes. As such, this researcher chose a cross-sectional survey to address teachers’ perceptions of teacher-leadership in high schools.

Independent variables are the presumed causal variable in a relationship and the dependent variable is the presumed effect of that variable (Hoy, 2010). For the purposes of this non-experimental quantitative survey research, the independent variables include years of teaching experience, degree level, gender, and position of teacher-leadership; the dependent variable is various perceptions of teacher-leadership.

Acknowledging the complexities of epistemological foundations of quantitative research, this researcher identified that the purpose of this study was to investigate high school teachers' perceptions of teacher-leadership, and with a quantitative instrument conducted an inquiry into teachers' perceptions of teacher-leadership and what influences teachers' perceptions. The study investigated the differences in perceptions according to these specific considerations: attained education level, teaching experience, formal teacher-leader roles, and gender.

Research Method

This study used a quantitative methodology to examine high school teachers' perceptions of teacher-leadership, and through this quantitative cross-sectional survey employed descriptive and inferential statistics. Descriptive statistics indicate the spread of scores through variance, standard deviation, and range while describing independent and dependent variables (Creswell, 2012). Inferential statistics help to "compare groups or related two or more variables" (p. 187).

Sample

The population of the research was high school teachers; specifically the representative sample constituted high school teachers within one urban school division in central Saskatchewan. To ensure an unbiased sample, the researcher employed purposeful sampling.

Data Collection

The superintendents responsible for research in the school division were approached using the letter for permission (see Appendix A), requesting that they grant the researcher approval to contact high-school division principals requesting time at staff meetings to invite all teaching staff to participate in the survey. With the co-operation of the agreeing principal, the researcher arranged a suitable time to address the teaching staff through staff meetings. At the

staff meeting, teaching staff were issued invitations to participate in the survey using the Script for Recruitment (see appendix E), and the researcher then answered any questions related to the study. Following this stage, an e-mail invited all participants to complete the web-based survey (see appendix B).

The Letter of Consent outlined all terms of the study, provided contact information (e-mail and telephone number) of the researcher, and included a link to the online survey. Completion of the online survey implied that the participant had consented to take part in the study. Furthermore, participants could contact the researcher if they desired to withdraw consent to participate in the study at any time. The data corresponding to the date and time of their survey were then deleted.

Participants were not to divulge their names on the survey, and participation in the study consisted of spending approximately eight to ten minutes completing an online questionnaire.

Incorporated into the survey were demographic questions in order to identify potential independent variables (i.e. years of teaching experience, gender, and position of teacher-leadership and degree levels attained). As a minimal risk project, however, only aggregate data appeared when analyzing teacher responses.

For the measurement of response rates and to ensure all schools had access to the survey, each school had a separate link to the survey. If a school response rate was low, reminder e-mails were sent to the staff. School location did not appear in the data analysis. Therefore, all data were collapsed when analysis began and school locations were discarded.

The University of Saskatchewan's Saskatchewan Educators Leadership Unit (SELU) provided the web-access and stored the collected data on its server until the completion of the survey. Safeguards of the server included password-protected access, firewalls, and computer

access separate from public areas. Safety of the data was maintained through password-protected security of all electronic data. Completed surveys received a random identification number with the date and time of the survey's completion; at no time was there a connection between the data collected and the originating computer's IP address. These methods ensured the privacy and confidentiality of all participants.

Prior to full implementation, five teachers piloted the web-based survey, providing feedback as to the accessibility of the web-based questionnaire and informing the distribution of the larger survey. As a result of that study, no changes were made.

The Participants

Spillane & Camburn (2008) questioned who should provide evidence of distributed leadership: leaders, followers, or both? The 141 participants in this study included high-school teachers and high-school formal teacher-leaders within the Cecilia School Division. It was important to survey the perceptions of both the teachers and the teacher-leaders to study the relationships between the two perspectives. As participants, they completed a seventeen-item questionnaire and a background-information questionnaire.

Instrument

The Teacher-Leadership Inventory (TLI) (see appendix C) developed by Angelle and DeHart (2011) constituted the data-collection instrument, as it speaks to four factors of teacher-leadership. No changes to the instrument were necessary, since the researcher designed the seventeen items measuring the extent of teacher-leadership in schools. The wording of the instrument targeted teachers as participants; therefore, the TLI fits the population of the study.

Angelle and DeHart (2011) constructed the TLI through a multistage process. In the first phase of the instrument development, they interviewed 14 administrators and 51 teachers to run

an exploratory factor analysis. Participants were located in 11 schools in a southeastern state in the United States of America. The researcher approached participants with open-ended questions aimed at obtaining an accurate picture of teacher-leadership within the social context of the school. They conducted a constant comparative analysis, and the following five themes of teacher-leadership emerged from the analysis: educational role model, decision maker, visionary, designee, and supra-practitioner.

In the next stage, the researchers used the results of the previous qualitative analysis to construct a 25-item survey intended to measure the extent of teacher-leadership at the school level. Experts from three separate universities examined the survey, with their suggestions incorporated into a revised version administered to a focus group of doctoral students consisting of teachers, school-level administrators, and district-level administrators. Further suggestions for improvement came from the focus group, initiating the final version of the survey.

The final stage of the survey saw it administered twice, with the conduction of two-factor analyses on the results. In the first administration, explanatory-factor analysis went over the 25-item questionnaire, resulting in the deletion of eight items from the questionnaire. This exploratory analysis also resulted in a four-factor model of teacher-leadership. In the second administration of the final 17-item questionnaire researchers conducted, a confirmatory factor analysis fully supported the four-factor model.

The final version of the TLI consists of 17 statements constructed along a four-point Likert-type scale (never, seldom, sometimes, and routinely) designed to measure the extent of teacher-leadership in schools. Angelle and DeHart (2011) reported psychometric properties as Cronbach α reliability of .85 for the entire instrument. The instrument section will discuss reliability of individual dimensions of the instrument in quality and trustworthiness

Angelle and DeHart (2011) foresaw the replication of their study using the TLI. A duplication of the study would extract its full potential in varying contexts and social settings, thus allowing more information as to its effectiveness. An administration of the TLI to a varied population would provide valuable feedback to strengthen the current model. This study was the second application of the TLI.

Quality and Trustworthiness of the Instrument

Angelle and DeHart (2011) validated the Teacher-Leadership Inventory (see Appendix C) through an explanatory factor analysis and a confirmatory factor analysis. Creswell (2012) stated, “validity is the degree to which all of the evidence points to the intended interpretation of test scores for the proposed purpose” (p.159). In 2010, Angelle and DeHart presented their paper to the American Educational Research Association, outlining the quality and trustworthiness of the TLI. The TLI instrument scored a Cronbach α reliability of .85.

Individual dimensions of the instrument are as follows. The α reliability for the first factor, Sharing Expertise, was .84; a sample item from the TLI for this factor is this: “Other teachers willingly offer me assistance if I have questions about how to teach a new topic or skill.” The second factor, Sharing Leadership, had an α of .84; an item from the TLI for this factor included “Teachers have opportunities to influence important decisions even if they do not hold an official leadership position.” With an α of .85, the third factor, Supra-Practitioner, is exemplified by this statement: “Teachers willingly stay after school to work on school improvement activities.” The following represents a sample item from the Principal Selection factor: “Most teachers in leadership positions only serve because they have been principals appointed.” The last factor had an α reliability of .56.

Stable and consistent scores from an instrument speak of its reliability (Cresswell, 2012).

Initially administered in numerous school locations in a southeastern state in the United States, the TLI internally questioned the four factors in multiple statements; therefore, internal reliability exists within the TLI. Future replication of the study can only further strengthen the TLI. The administration of the TLI to a diverse population can strengthen the model by supporting the initial results or by introducing adaptations for model improvement.

Angelle and DeHart's (2011) Teacher-Leadership Inventory (TLI) (see appendix C) examines four factors of teacher-leadership: (a) Sharing Expertise (SE), (b) Sharing Leadership (SL), (c) Supra-Practitioner (SP), and (d) Principal Selection (PS). Factor (a), SE, appears in questions one, two, three, four, and seven; a sample item from this factor is this: "Teachers discuss ways of improving student learning". Questions eight, nine, and ten reported on SL. A sample item is as follows: "Teachers willingly stay after school to help other teachers who need assistance." SP was reported in questions five, six, twelve, thirteen, fourteen, and sixteen, showing representation in this item: "Time is provided for teachers to collaborate about matters relevant to teaching and learning." The final factor, PS, makes an appearance in questions eleven, fifteen, and seventeen; the following is an example: "Administrators object when teachers take on leadership responsibilities." All 17 questions of the TLI link to one of the four factors of teacher-leadership. As such, responses measure through a one-way between-group analysis of variance (ANOVA).

The TLI employs a four-point Likert-type scale (never, seldom, sometimes, and routinely), designed to measure the extent of teacher-leadership in schools.

The Demographic (see appendix D) consisted of questions regarding years of teaching experience (first year, one to five years, six to nine years, ten to fifteen years, sixteen to twenty years, twenty-one to twenty five years and more than twenty-six years), gender of male or

female, highest level of degree attained (Bachelor, Bachelor and certificate, more than one Bachelor, Master's, Master's plus thirty credit units, PhD), current position of teacher-leadership (Learning Literacy Leader, Teacher on Assignment, English as an Additional Language, Learning Assistance Teacher, Department Heads) yes or no.

Data Analysis

Used was one-way between groups Analysis of Variance (ANOVA) method of data analysis in this cross-sectional survey research, therefore comparing the sample data on a dependent variable with more than one independent variable. The strength of the ANOVA technique is that researchers can compare groups while investigating differences. Limitations to the ANOVA technique include the requirement of balanced data, requiring each participant to be measured on each variable at the same point in time, resulting in an equal number of repeated observations (Hoy et al, p. 216).

Guiding the interpretation of the one-way ANOVA was the F value. Comparing F ratio values for each dependent variable informed the researcher of differences existing for each independent variable. If the calculated F value is greater than the expected F value, one concludes that a statistically significant difference exists among the means of some of the groups in the study. With the establishment of the significance of the F ratio, a post-hoc test was run on the data. Further, a post-hoc test assisted in identifying the specific pairs of means between which the differences are statistically significant.

The presentation of the data appears in table form for each section. The scores in the tables derive from mean scores, degrees of freedom, probability value, standard deviation, and F ratios, thus considering all four factors of leadership in the scores.

Ethical Considerations

This study followed the research protocol established by the University of Saskatchewan Ethics Board; thus, approval from the University of Saskatchewan Behavioural Research Ethics Board (Beh-REB) was required and was granted on February 05, 2013.

Survey research has three distinct points of ethical considerations: collecting data, analyzing results, and reporting results (Creswell, 2012). When researchers engage respondents, sensible procedures should be in place to keep the respondents safe. Respondents should experience no risk to their safety, nor should they be put in a situation of being deceived, misled, or given inaccurate information, even inadvertently.

In the analysis, all information gathered from the survey respondents was kept in confidence; this procedure upheld the safety of all responding participants. Minimizing the links between respondent identifiers and answers helped protect the confidentiality of responses. Creswell (2012) suggested, “Links between the answers and participants should be made with an ID number that is only known by the researcher or research team” (p.402).

In reporting results, the researcher did not overtly or inadvertently share participants’ identities, but held these in the strictest of confidence. Researchers must also be cautious when reporting on a “small subset of results that will disclose the identity of specific individuals” (Creswell, 2012, p. 402). Six years after the completion of the project, all questionnaires will be destroyed.

CHAPTER 4

Results

Overview

The purpose of this study was to investigate high school teachers' perceptions of teacher-leadership. Using a quantitative instrument, the researcher conducted an inquiry into teachers' perceptions of teacher-leadership and what influences teachers' perceptions. The study investigated the differences in perceptions according to these specific considerations: attained education level, teaching experience, formal teacher-leader roles, and gender.

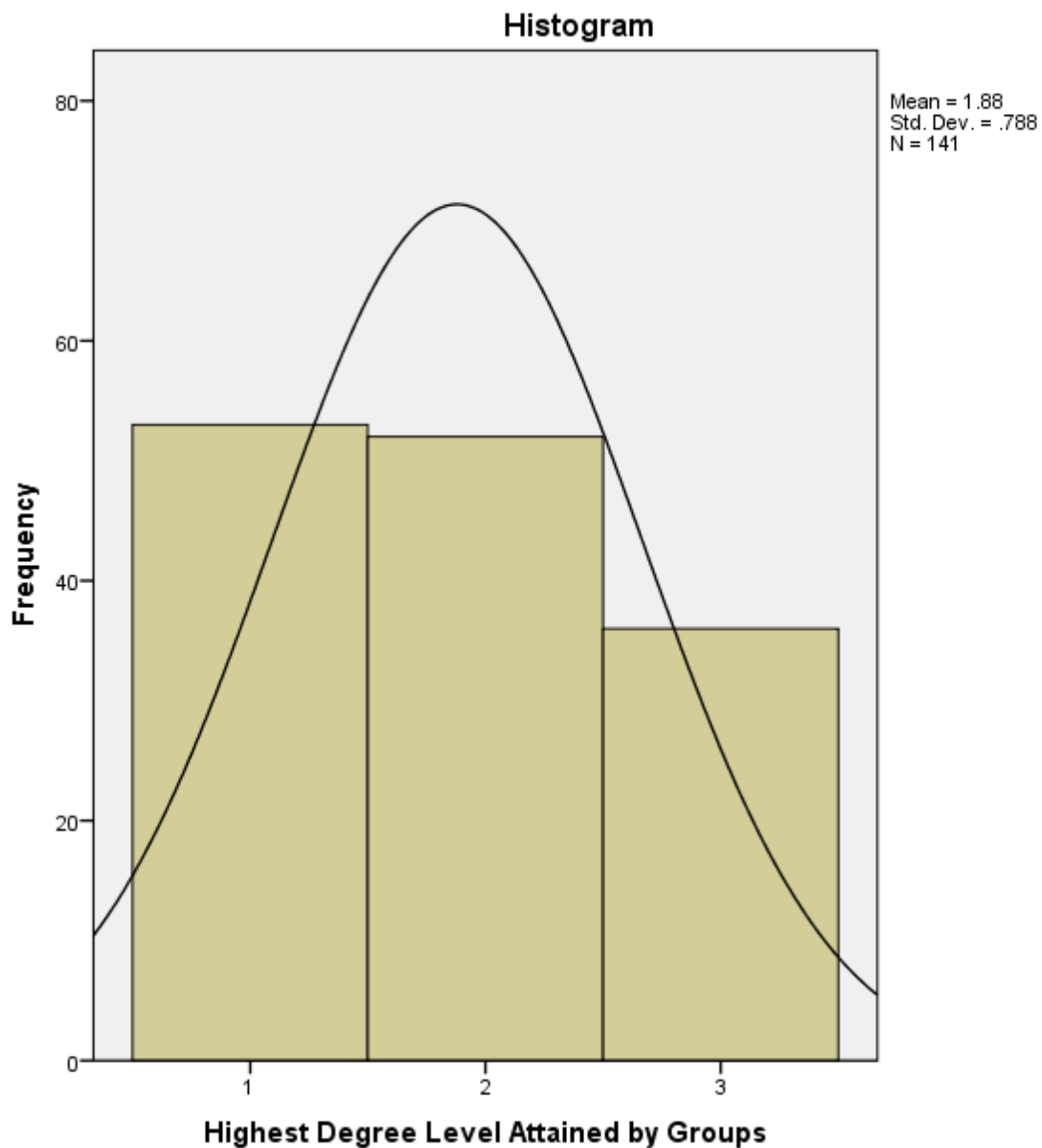
Overview of Analysis

The TLI (Angelle & DeHart, 2011) calculates four dependent variables: Sharing Expertise, Sharing Leadership, Supra Practitioner, and Principal selection. Sharing Expertise focuses on the sharing of pedagogical or classroom management knowledge; collaboration and shared practice is the agency of this form of teacher-leadership. The items within this variable measure not only the perceptions of teacher-leader skills but also teachers' willingness to share these skills and knowledge with fellow teachers. The ongoing relationship between the administration and the teaching staff is the variable of Sharing Leadership. Supra Practitioner measures perceptions of teacher behaviors that are not only beyond the prescribed roles, but also are engaged in willingly by the staff. The final variable, Principal Selection, identifies a principal who creates in-groups among certain teachers as well as a principal who takes exception to certain teachers showing leadership, thus creating out-groups.

Degree Level

The first research question in this study was this: What are the differences in teachers' perceptions of teacher-leadership according to different degree levels attained?

Of the 141 respondents, 37.6% (n = 53) held a Bachelor degree or a Bachelor degree and a certificate, 36.9% (n = 52) held a Bachelor degree and another Bachelor degree, and 25.5% (n = 36) held a Master's degree or a Master's degree plus additional graduate credit units. Figure 4.2.1 displays this demographic data. The data sample was grouped into three groups, which aligned with the norm sample of Angelle and DeHart (2011).



Note. Group 1: Bachelor degree/Bachelor plus certificate; Group 2: Two Bachelors; Group 3: Master's degree/Master's degree +.

Figure 4.2.1. Histogram of number of participants according to highest degree level attained.

Four one-way between-groups ANOVAs were conducted on the independent variable Degree Level. There was a significant difference found within Sharing Expertise (SE) and Sharing Leadership (SL); however, there was not a significant difference between Supra Practitioner (SP) and Principal Selection (PS). Levene's test for equality of variances showed homogeneity of variances for the four factors. A description of the statistical analysis results follows.

The first one-way between-groups analysis of variance conducted explored the impact of degree level attained on levels of SE, as measured by the Teacher-Leadership Inventory (TLI). Participants were divided into three groups according to the level of education attained: (Group 1: Bachelor degree/Bachelor plus certificate, Group 2: Two Bachelors, Group 3: Master's degree/Master's degree +). There was no statistically significant difference at the $p < .05$ level in TLI scores for the three degree-levels-attained groups: $F(2, 138) = 1.16, p = 0.317$. Table 4.2.2 displays results of the one-way ANOVA SE.

Table 4.2.2. Results of Tukey HSD Comparing Highest Degree Level Attained and SE

Years of Teaching Experience	Years of Teaching Experience	Mean Difference	Std Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Bachelor/Bachelor plus Certificate	More than one Bachelor	-.084	.122	.771	-.37	.21
	Master's/ Master's +	-.206	.135	.283	-.53	.11
	Bachelor/Bachelor plus Certificate	.084	.122	.771	-.21	.37
More than one Bachelor	Master's/ Master's +	-.122	.136	.643	-.44	.20
	Bachelor/Bachelor plus Certificate	.206	.135	.283	-.11	.53
Master's/ Master's +	More than one Bachelor	.122	.136	.643	-.20	.44

A second one-way between-groups analysis of variance conducted explored the impact of degree level attained on levels of SL, as measured by the Teacher-Leadership Inventory (TLI), and divided participants into three groups according to the level of education attained: (Group 1: Bachelor degree/Bachelor plus certificate, Group 2: Two Bachelors, Group 3: Master's degree/Master's degree +). A statistically significant difference emerged at the $p < .05$ level in TLI scores for the three degree-levels-attained groups: $F(2, 138) = .193, p = 0.825$. Displayed in Table 4.2.3 are the one-way ANOVA results for SL.

A third one-way between-groups analysis of variance explored the impact of degree level attained on levels of SP, as measured by the Teacher-Leadership Inventory (TLI). Again, participants found their way into three groups according to the level of education attained: (Group 1: Bachelor degree/Bachelor plus certificate; Group 2: Two Bachelors; Group 3: Master's degree/Master's degree +). No statistically significant difference appeared at the $p < .05$ level in TLI scores for the three degree-levels-attained groups: $F(2, 138) = 0.573, p > 0.565$. Table 4.2.3 shows results for the one-way ANOVA, SP.

The last one-way between-groups analysis of variance conducted explored the impact of degree level attained on levels of PS, as measured by the Teacher-Leadership Inventory (TLI). The researcher divided participants into three groups according to the level of education attained: (Group 1: Bachelor degree/Bachelor plus certificate, Group 2: Two Bachelors, Group 3: Master's degree/Master's degree +). No statistically significant difference existed at the $p < .05$ level in TLI scores for the three degree-levels-attained groups: $F(2, 138) = .154, p = 0.857$. Table 4.2.3 recaps the results for the one-way ANOVA, PS.

Table 4.2.3. One-way between-groups ANOVA for Highest Degree Level Attained

TLI Factor	<i>df</i>	Mean Square	F	Sig.
Sharing Expertise				
Between groups	2	.455	1.160	.317
Within groups	138	.392		
Sharing Leadership				
Between groups	2	.053	.193	.825
Within groups	138	.277		
Supra Practitioner				
Between groups	2	.264	.573	.565
Within groups	138	.461		
Principal Selection				
Between groups	2	.050	.154	.857
Within groups	138	.323		

Note. TLI = Teacher-Leadership Inventory

* $p < .05$

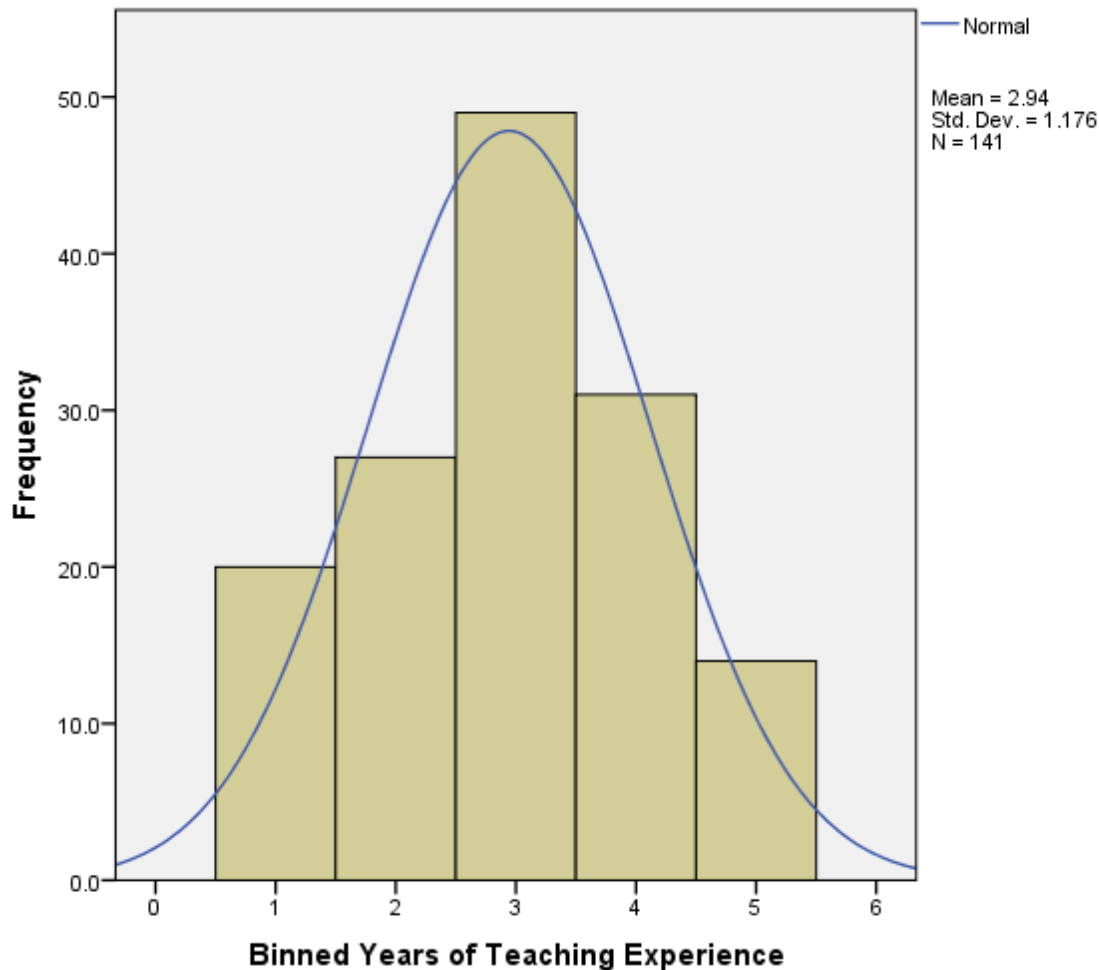
This study reveals no statistical significant difference in the relationship between teacher perceptions of teacher leadership in a school and highest degree level attained. Important to note is a change in groupings versus the norm sample for this study's data set. To run the one-way between-groups ANOVA, the researcher required equal sample sizes. Chapter Five will discuss this change further.

Years of Teaching Experience

The second research question in this study was this: What are the differences in teachers' perceptions of teacher-leadership according to varying teaching experience?

Teaching experience ranged from a minimum of less than one year to 31 or more years of teaching, with a mean experience of 16.08 and a mode of 18 among the 141 respondents. Five groups comprise the data sample: Group 1: five years or fewer teaching ($n = 20$), Group 2: six-12 years teaching ($n = 27$), Group 3: 13-20 years teaching ($n = 49$), Group 4: 21 to 27 years teaching ($n = 31$), Group 5: 28 + years teaching ($n = 14$). These groups differ slightly from the

normal sample of four groups (Group 1: five years or fewer teaching, Group 2: six to 15 years teaching, Group 3: 16 to 30 years teaching, Group 4: 30+ years teaching. The groups were changed from the norm sample to have equal sample numbers.



Note. Group 1: Five years or fewer teaching, Group 2: Six to twelve years teaching, Group 3: Thirteen to twenty years teaching, Group 4: Twenty-one to Twenty-seven years teaching, Group 5: Twenty-eight + years teaching.
Figure 4.3.1. Histogram of number of participants according to years of teaching experience.

Four one-way between-groups analysis of variances were conducted on the independent variable Years of Teaching Experience. Found were statistical differences for the factors SE and SL; no significant differences emerged for the factors SP and PS. Levene's test for equality of variances showed homogeneity of variances for the four factors. An analysis of statistical results follows.

The first one-way between-groups analysis of variance conducted explored the impact of years of teaching experience on levels of SE, as measured by the Teacher-Leadership Inventory (TLI), dividing participants into five groups according to the years of teaching experience attained: Group 1: five years or fewer teaching, Group 2: six-12 years teaching, Group 3: 13-20 years teaching, Group 4: 21 to 27 years teaching, Group 5: 28 + years teaching. A statistically significant difference emerged at the $p < .05$ level in TLI scores for years of teaching experience: $F(4, 136) = 4.4, I = 0.002$. The actual difference in mean scores between the groups signified a medium effect. The effect size calculated using eta squared was .11. Table 4.3.4 displays results for the one-way between-group ANOVA, SE. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 1.95, SD = 0.89$) differed significantly from Group 2 ($M = 2.48, SD = 0.58$), the mean score for Group 1 ($M = 1.95, SD = 0.89$) significantly differed from Group 3 ($M = 2.57, SD = 0.50$), and the mean score for Group 1 ($M = 1.95, SD = 0.89$) differed significantly from Group 4 ($M = 2.58, SD = 0.56$). Group 1 ($M = 1.95, SD = 0.89$) did not differ significantly from Group 5. Table 4.3.2 displays results from the Tukey.

Table 4.3.2 Results of Tukey HSD Comparing Years of Teaching Experience and Sharing Expertise

Years of Teaching Experience	Years of Teaching Experience	Mean Difference	Std Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
< = 5	6-12	-.531*	.177	.026	-1.02	-.04
	13-20	-.621*	.159	.001	-1.06	-.18
	21-27	-.631*	.172	.003	-1.11	-.16
	28+	-.550	.209	.069	-1.13	.03
6-12	< = 5	.531*	.177	.026	.04	1.02
	13-20	-.090	.143	.971	-.49	.31
	21-27	-.099	.158	.970	-.53	.34
	28+	-.019	.197	1.000	-.56	.53
13-20	< = 5	.621*	.159	.001	.18	1.06
	6-12	.090	.143	.971	-.31	.49
	21-27	-.009	.137	1.000	-.39	.37
	28+	.071	.181	.995	-.43	.57

21-27	< = 5	.631*	.172	.003	.16	1.11
	6-12	.099	.158	.970	-.34	.53
	13-20	.009	.137	1.000	-.37	.39
	28+	.081	.193	.994	-.45	.61
28+	< = 5	.550	.209	.069	-.03	1.13
	6-12	.019	.197	1.000	-.53	.56
	13-20	-.071	.181	.995	-.57	.43
	21-27	-.081	.193	.994	-.61	.45

*. The mean difference is significant at the 0.05 level.

A second one-way between-groups analysis of variance explored the impact of years of teaching experience on levels of SL, as measured by the Teacher-Leadership Inventory (TLI). Participants were divided into five groups according to years of teaching experience (Group 1: five years or fewer teaching, Group 2: six-12 years teaching, Group 3: 13-20 years teaching, Group 4: 21 to 27 years teaching, Group 5: 28 + years teaching). A statistically significant difference appeared at the $p < .05$ level in TLI scores for years of teaching experience: $F(4, 136) = 2.7, p = 0.032$. Despite reaching statistical significance, the actual difference in mean scores between the groups signified a medium effect. The effect size calculated using eta squared was .07. Table 4.3.4. displays the one-way between-groups ANOVA, SL. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 1.95, SD = 0.89$) was significantly different from Group 2 ($M = 2.48, SD = 0.58$), and the mean score for Group 1 ($M = 1.95, SD = 0.89$) was significantly different from Group 3 ($M = 2.57, SD = 0.50$). Group 1 ($M = 1.95, SD = 0.89$), however, did not differ significantly from either Group 4 or Group 5. Table 4.3.3 shows the results from the Tukey HSD.

Table 4.3.3 Results of Tukey HSD Comparing Years of Teaching Experience and SL

Years of Teaching Experience	Years of Teaching Experience	Mean Difference	Std Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
< = 5	6-12	-.428*	.151	.041	-.84	-.01
	13-20	-.405*	.135	.027	-.78	-.03
	21-27	-.392	.146	.063	-.80	.01

	28+	-.293	.178	.471	-.78	.20
	< = 5	.428*	.151	.041	.01	.84
6-12	13-20	.023	.122	1.000	-.32	.36
	21-27	.036	.134	.999	-.34	.41
	28+	.135	.168	.929	-.33	.60
	< = 5	.405*	.135	.027	.03	.78
13-20	6-12	-.023	.122	1.000	-.36	.32
	21-27	.013	.117	1.000	-.31	.34
	28+	.112	.155	.950	-.32	.54
	< = 5	.392	.146	.063	-.01	.80
21-27	6-12	-.036	.134	.999	-.41	.34
	13-20	-.013	.117	1.000	-.34	.31
	28+	.099	.164	.974	-.36	.55
	< = 5	.293	.178	.471	-.20	.78
28+	6-12	-.135	.168	.929	-.60	.33
	13-20	-.112	.155	.950	-.54	.32
	21-27	-.099	.164	.997	-.55	.36

*. The mean difference is significant at the 0.05 level.

The third one-way between-groups analysis of variance conducted explored the impact of years of teaching experience on levels of SP, as measured by the Teacher-Leadership Inventory (TLI), dividing participants into five groups according to years of teaching experience: (Group 1: < = five years teaching, Group 2: six-12 years teaching, Group 3: 13-20 years teaching, Group 4: 21-27 years teaching, Group 5: 28 + years teaching). There was no statistically significant difference at the $p < .05$ level in TLI scores for the five groups: $F(4, 136) = 0.844$, $p = 0.5$. Table 4.3.4 displays results for SP.

The last one-way between-groups analysis of variance investigated the impact of years of teaching experience on levels of PS, as measured by the Teacher-Leadership Inventory (TLI). The researcher divided participants into five groups according to years of teaching experience: (Group 1: five years or fewer teaching, Group 2: six-twelve years teaching, Group 3: thirteen-twenty years teaching, Group 4: twenty-one to twenty-seven years teaching, Group 5: twenty-eight + years teaching). No statistically significant differences appear at the $p < .05$ level in TLI scores for the five groups: $F(4, 136) = 0.34$, $p = 0.85$. Table 4.3.4 displays the results for PS.

Table 4.3.4. One-way between-group ANOVA for Years of Teaching Experience

TLI Factor	<i>df</i>	Mean Square	F	Sig.
Sharing Expertise				
Between groups	4	1.574	4.392	.002*
Within groups	136	.358		
Sharing Leadership				
Between groups	4	.710	2.727	.032*
Within groups	136	.260		
Supra Practitioner				
Between groups	4	.388	.844	.499
Within groups	136	.460		
Principal Selection				
Between groups	4	.190	.335	.854
Within groups	136	.325		

Note. TLI = Teacher-Leadership Inventory

* $p < .05$

Based on varying years of teaching experience, this study revealed significant statistical differences in the relationship between teacher perceptions of the extent of teacher leadership. Specifically, the dependent variables Sharing Expertise and Sharing Leadership revealed a significant statistical difference in the one-way between-groups ANOVA. For the factor Sharing Expertise, neophyte and teachers that are more experienced acknowledged the sharing of expertise occurred more routinely than did the other teachers. In addition, neophyte teachers and teachers with more than 21 years of teaching experience perceived sharing leadership occurred less frequently than did all other teachers. I will discuss the significance of these findings in Chapter Five.

Occupying a Position of Formal Teacher-Leadership

The third research question in this study was this: What are the differences in teachers' perceptions of teacher-leadership according to teachers who occupy formal teacher-leader roles and those who do not occupy formal teacher-leader roles?

When asked if they occupy a position of teacher-leadership, 38% ($n = 53$) of participants

affirmed they did, whereas 62% ($n = 88$) of participants stated they did not hold a position of teacher-leadership. Ran were four independent t-tests on the four variables between the participant samples. The one categorical, independent variable is whether teachers occupy a position of formal teacher-leadership, while the four continuous, dependent variables include SE, SL, SP, and PS. The descriptive statistics indicate no significant differences among the aforementioned dependent variables. SE, SL, and SP factors violated Levene's test for equality of variances; to account for the lack of homogeneity of variance, nonparametric Mann-Whitney U tests were conducted. Table 4.4.1 illustrates the statistical findings of the t-tests on the four factors.

Next, the first independent-samples t-test conducted compared the SE scores for those who occupy a position of formal teacher-leadership. Levene's test for equality of variances was violated; therefore, used was an alternative t-value, equal variances not assumed. No significant differences in score appeared for those who did occupy a position of formal teacher-leadership ($M = 2.58$, $SD = .535$) and those who did not occupy a position of teacher-leadership ($M = 2.39$, $SD = .668$; $t(128.1) = 1.94$, $p = .055$, two-tailed). The magnitude of the differences in the means (means difference = .199, 95% CI : -.004 to .401) was small (eta squared = 0.03).

The second independent-samples t-test conducted compared the SL scores for those who occupy a position of formal teacher-leadership. Levene's test for equality of variances was violated, therefore, an alternative t-value was used, equal variances not assumed. No significant differences in score emerged for those who did occupy a position of formal teacher-leadership ($M = 2.75$, $SD = .434$) and those who did not occupy a position of teacher-leadership ($M = 2.65$, $SD = .568$; $t(131.142) = 1.258$, $p = .210$, two-tailed). The magnitude of the differences in the means (means difference = 0.107, 95% CI : -.061 to .275) was very small (eta squared = 0.01).

The third independent-samples t-test conducted compared the SP scores for those who occupy a position of formal teacher-leadership. Levene's test for equality of variances was violated: therefore, an alternative t-value was used, equal variances not assumed. No significant difference in score are apparent for those who did occupy a position of formal teacher-leadership ($M = 2.11$, $SD = .698$) and those who did not occupy a position of teacher-leadership ($M = 2.06$, $SD = .0667$; $t(105.833) = 0.472$, $p = .638$, two-tailed). The magnitude of the differences in the means (means difference = 0.056, 95% *CI*: -.180 to .293) was very small (eta squared = 0.002).

The last independent-samples t-test was conducted to compare the SP scores for those who occupy a position of formal teacher-leadership. Here, Levene's test for equality of variances was not violated. No significant differences in score emerged for those who did occupy a position of formal teacher-leadership ($M = 1.58$, $SD = .570$) and those who did not occupy a position of teacher-leadership ($M = 1.56$, $SD = .060$; $t(139) = 0.285$, $p = .776$, two-tailed). The magnitude of the differences in the means (means difference = 0.028, 95% *CI*: -.180 to .293) was very small (eta squared = 0.).

Table 4.4.1. Results of Independent-Samples T-test for Occupying a Position of Formal Teacher-leadership

Factor	Position of Formal Teacher-leadership		<i>t</i>	<i>df</i>
	Occupy	Does not Occupy		
Sharing Expertise	2.58 (.535)	2.39 (.668)	1.940	128.106
Sharing Leadership	2.75 (.434)	2.65 (.568)	1.258	131.142
Supra-Practitioner	2.11 (.698)	2.06 (.0667)	.472	105.833
Principal Selection	1.58 (.570)	1.56 (.060)	.285	139

Note. Standard Deviations appear in parentheses below means.

Overall, this study found no statistical difference in teachers' perceptions of teacher-leadership according to teachers who occupy formal teacher-leader roles and those who do not

occupy formal teacher-leader roles. Chapter Five will discuss these findings further.

Gender

The fourth research question in this study was: What are the differences in teachers' perceptions of teacher-leadership according to gender?

The sample of 141 respondents included 56% ($n = 79$) female and 44% ($n = 62$) male. Run were four independent t-tests on the four variables between the participant samples. The one categorical, independent variable was gender, while the four continuous dependent variables included SE, SL, SP, and PS. The descriptive statistics indicated a significant difference for the factor SE; however, SL, SP, and PS indicated no significant differences. Although significant differences exist for the factor SE, Levene's test for equality of variances was violated. To account for the lack of homogeneity of variance, a nonparametric Mann-Whitney U test was conducted. Table 4.5.2 illustrates results for the dependent variable.

The first independent-samples t-test was conducted to compare the SE scores for males and females. Levene's test was violated; therefore, an alternative t-value was used, equal variances not assumed. A significant difference emerged for males ($M = 2.32$, $SD = .696$) and females ($M = 2.57$, $SD = .547$; $t(113) = 2.293$, $p = .024$, two-tailed). The magnitude of the differences in the means (means difference = .247, 95% *CI*: .034 to .460) was small (eta squared = 0.036).

A Mann-Whitney U test revealed a significant difference in the SE levels of females ($Md = 3$, $n = 79$) and males ($Md = 2$, $n = 62$), $U = 2004$, $z = -2.084$, $p = .037$, $r = 0.2$. The effect size is small.

Table 4.5.1 Summary of Mann-Whitney U Tests Comparing Gender and Sharing Expertise

Groups	<i>n</i>	<i>M</i>	Median	<i>U</i>	<i>Z</i>	<i>p</i>
Males	62	2.32	2	2004	-2.084	.037
Females	79	2.57	3			

The second independent-samples t-test conducted compared the SL scores for males and females. Again, Levene's test was violated; therefore, used was an alternative t-value, equal variances not assumed. No significant differences in score appeared for males ($M = 2.6$, $SD = .586$) and females ($M = 2.76$, $SD = .459$; $t(113) = 1.797$, $p = .075$, two-tailed). The magnitude of the differences in the means (means difference = .247, 95% *CI*: .034 to .460) was very small (eta squared = 0.02).

A third independent-samples t-test conducted compared the SP scores for males and females. No significant differences in score existed for males ($M = 1.94$, $SD = .67$) and females ($M = 2.76$, $SD = .459$; $t(139) = 2.247$, $p = .026$, two-tailed). The magnitude of the differences in the means (means difference = .254, 95% *CI*: .031 to .478) was very small (eta squared = 0.02).

The last independent-samples t-test was conducted to compare the PS scores for males and females. Again, no significant differences in score emerged for males ($M = 1.53$, $SD = .62$) and females ($M = 1.59$, $SD = .519$; $t(118.6) = .653$, $p = .515$, two-tailed). The magnitude of the differences in the means (means difference = .063, 95% *CI*: -.131 to .257) was very small (eta squared = 0.003).

Table 4.5.2. Results of Independent-Samples T-test for Gender

Factor	Gender		<i>t</i>	<i>df</i>
	Male	Female		
Sharing Expertise	2.32 (.696)	2.57 (.574)	2.293*	113.647
Sharing Leadership	2.60 (.586)	2.76 (.459)	1.797	113.381
Supra Practitioner	1.94 (.670)	2.76 (.459)	2.247	139
Principal Selection	1.53 (.620)	1.59 (.519)	.653	139

Note. * = $p < .05$. Standard Deviations appear in parentheses below means.

Conducted were five independent-samples t-tests comparing the five questions identifying Sharing Expertise to identify which TLI questions saw significance in their scores.

What follows summarizes the five independent-samples t-tests.

An independent-samples t-test compared TLI question 1 scores for males and females. Levene's test was violated; therefore, an alternative t-value was used, equal variances not assumed. No significant differences appeared in scores for males ($M = 2.2097$, $SD = .792$) and females ($M = 2.3924$, $SD = .608$). The magnitude of the differences in the means (means difference = .183, 95% *CI*: -.058 to .424) was very small (eta squared = 0.006).

Next, an independent-samples t-test compared TLI question 2 scores for males and females. Levene's test was violated; therefore, an alternative t-value was used, equal variances not assumed. No significant differences in scores emerged for males ($M = 2.5$, $SD = .718$) and females ($M = 2.608$, $SD = .5648$). The magnitude of the differences in the means (means difference = .107, 95% *CI*: -.112 to .328) was again very small (eta squared = 0.006).

An independent-samples t-test compared TLI question 3 scores for males and females. Levene's test was violated; therefore, an alternative t-value was used, equal variances not assumed. No significant differences were apparent in scores for males ($M = 2.38$, $SD = .732$) and females ($M = 2.608$, $SD = .608$). The magnitude of the differences in the means (means difference = .221, 95% *CI*: -.008 to .449) was small (eta squared = 0.03).

An independent-samples t-test then compared TLI question 4 scores for males and females. Levene's test was violated; therefore, an alternative t-value was used, equal variances not assumed. There was no significant differences in scores for males ($M = 2.42$, $SD = .714$) and females ($M = 2.519$, $SD = .617$). The magnitude of the differences in the means (means difference = .099, 95% *CI*: -.126 to .326) was once again very small (eta squared = 0.005).

Independent-samples t-test conducted compared TLI question 7 scores for males and females. Levene's test was violated; therefore, an alternative t-value was used, equal variances

not assumed. No significant differences appeared in scores for males ($M = 1.984$, $SD = .819$) and females ($M = 2.11$, $SD = .679$). The magnitude of the differences in the means (means difference = .130, 95% *CI*: -.126 to .385) was very small ($\eta^2 = 0.005$).

Overall, a small statistical difference in the factor Sharing Expertise did appear in teachers' perceptions of teacher-leadership according to gender. Upon further analysis of the five questions examining Sharing Expertise, no bias was found in any one question.

Summary

Conducted were eight one-way between-group ANOVAs and eight T-tests to test for differences among the variables to answer the four research questions examining the construct of teacher-leadership through the perceptions of teachers completing the TLI. Of the eight one-way between-group ANOVAs, none of them violated the assumptions of homogeneity of variance, Some T-tests, however, violated Levene's test for assumption of homogeneity of variance, and so the research employed nonparametric bivariate procedures (Mann-Whitney U tests). A significant difference was apparent between differing degree levels attained and Sharing Expertise (SE), indicating respondents attaining a Bachelor degree had different perceptions of SE from respondents who had attained a Bachelor degree plus another Bachelor or a Certificate. The one-way between-group ANOVA indicated no statistical significance in the second, third, or fourth factors: Sharing Leadership (SL), Supra Practitioner (SP), and Principal Selection (PS). As well, a significant difference emerged between the variable of years of teaching experience and SE. Results indicated that of the five groups (Group 1: five years or fewer teaching, Group 2: six to twelve years teaching, Group 3: thirteen to twenty years teaching, Group 4: twenty-one to twenty-seven years teaching, Group 5: twenty-eight + years teaching), Group 1 differed significantly from Groups 2, 3, and 4 in their perception of SE. The variable SL showed a

statistical significance between Group 1 and Groups 2 and 3. The one-way between-groups ANOVA indicated no statistical significance for both variables SP and PS.

Four T-tests asked the third research question: what are the differences in teachers' perceptions of teacher-leadership according to teachers who occupy formal teacher-leader roles and those who do not occupy formal teacher-leader roles? Regarding the four factors, SE, SL, SP, and PS, no significant differences emerged between groups, indicating that the occupation of a formal teacher-leader role does not make a significant difference to the perceptions of teachers completing the TLI and the construct of teacher-leadership.

Further, four more T-tests asked the final research question: what are the differences in teachers' perceptions of teacher-leadership according to gender? A significant difference in how males perceived SE as compared to females became apparent. Levene's test indicated a lack of homogeneity of variance; therefore, a nonparametric Mann-Whitney *U* test was in order, indicating females placed a higher significance on SE than did males. The remaining three factors, SL, SP, and PS, revealed no statistical significance between males and females. Chapter Five will examine each of these questions in detail and explore future research opportunities.

CHAPTER FIVE

DISSCUSSION

The current study investigated the differences in high-school teachers' perceptions of teacher-leadership within the context of one Saskatchewan urban school division according to educators' attained education level, teaching experience, formal teacher-leader roles, and gender. One hundred and forty-one individuals participated in the study with highest degree levels ranging from a bachelor degree to master's degree with additional graduate credit units. Years of teaching experience ranged from one year to 28 plus years, with a mean of 16.08 years. Fifty-three participants held a position of teacher-leadership while 88 participants did not. Seventy-nine females and 62 males participated in the study.

The participants completed the Teacher-Leadership Inventory (TLI) and answered four biographical questions. The 17-item TLI questionnaire examined four factors of teacher-leadership: (a) Sharing Expertise (SE), (b) Sharing Leadership (SL), (c) Supra-Practitioner (SP), and (d) Principal Selection (PS). It employed a four point Likert-scale (never, seldom, sometimes, and routinely) designed to measure the extent of teacher-leadership in schools. The overall quality and trustworthiness of the TLI scored a psychometric property Cronbach α reliability of .85.

The researcher conducted eight one-way between-groups ANOVAs on the dependent variables, Degree Level and Years of Teaching Experience while running eight t-tests on occupying a position of teacher-leadership and gender. What follows is a discussion of this study's findings.

First, four statistical analyses investigated the independent variable, highest degree level attained. A one-way between-groups ANOVA tested for differences in factor scores among the

three levels of highest degree level attained. Of the four one-way between-groups ANOVA run on each of the four factors, SE, SL, SP and SL, no statistical differences of note appeared in teachers' perception of teacher-leadership. These results differed from the Norm Sample of Angelle and DeHart (2011), where the study found significant statistical differences for SE $F(3, 668) = 4.83, p = .002$, Sharing Leadership, $F(3, 668) = 4.77, p = .003$, and SP $F(3, 668) = 4.17, p = .006$. Differences in sample size and limitations of one-way between-group ANOVAs, however, may account for the differences in findings. Because of the differing sample sizes, the norm sample had 672 participants, while this study had 141 participants. Therefore, this sample used a different grouping of highest degree levels attained. Maintaining a common group size required in a one-way between-groups ANOVA, demanded this study's three groups be collated accordingly: Group 1: Bachelor degree/Bachelor plus certificate, Group 2: two Bachelors, Group 3: Master's degree/Master's degree +. This grouping differed from the normal sample groupings of Group 1 Bachelor degree, Group 2 Master's degree, and Group 3 Master's plus graduate hours. Grouping the data sets differently allowed the running of both ANOVAs, albeit implications of grouping the data sets differently included comparing contrasting data. In addition, the norming sample included participants from across seven U.S. states, while this study sampled one urban school division in central Saskatchewan.

One-way between-group ANOVAs examined the relationship between teacher perceptions of teacher-leadership and highest degree level attained. Significant statistical differences in factor scores among the five levels of years of teaching experience were found: Group 1: five years teaching or fewer ($n = 20$), Group 2: six to twelve years teaching ($n = 27$), Group 3: thirteen to twenty years teaching ($n = 49$), Group 4: twenty-one to twenty-seven years teaching ($n = 31$), Group 5: twenty-eight + years teaching ($n = 14$). Sharing Expertise, $F(4, 136)$

= 4.4, $p = 0.002$, and Sharing Leadership, $F(4, 136) = 2.7$, $p = 0.032$ both had a medium effect size according to eta squared. No statistical differences emerged for the factors Supra Practitioner or Principal Selection. Tukey post hoc comparisons of the five groups indicated that neophyte teachers gave significantly higher scores to Sharing Expertise as compared to Group 2, Group 3 and Group 4; Sharing Expertise is the ability of teacher-leaders to share professional pedagogical knowledge with their peers through collaboration and shared practice (Angelle & DeHart, 2011). Interesting to note the neophyte teachers shared common scores with the more experienced teachers in Group 5. This could be because teachers seek out the expertise of veteran teachers; as a consequence, more experienced teachers are repeatedly called upon to share their skills and knowledge within professional learning communities. Conversely, neophyte teachers seek out the professional assistance of other teachers with more regularity; hence, they would note sharing expertise as a more common occurrence. These results support those of Fleming and Kleinhenz (2007) in that professional learning cultures develop through professional learning conversations leading to a deeper understanding of both professional content and professional knowledge. It follows that professional conversations promote a high level of professional practice while supporting autonomous growth. According to the Tukey post hoc comparison, neophyte teachers indicated Sharing Leadership, the second factor, to be significantly lower than did Group 2 and Group 3; Sharing Leadership is the mutuality of leadership in a school including the willingness of the principal to share leadership and the willingness of teachers to engage in leadership opportunities (Angelle & DeHart, 2011). This perspective could be because more experienced teachers have built strong professional relationships and acknowledge more diverse leadership opportunities among their professional learning cultures than do the neophytes. These results support those of Harris (2003), who saw

that purposefully created conditions that include teachers in leadership will foster the development and the active cultivation of individual teacher-leaders. In addition, neophyte teachers may have a more narrow understanding of leadership and, therefore, are unaware of the various leadership roles being fulfilled within the context of the school.

Next, t-tests examined the relationship between teachers' perceptions of the extent of teacher-leadership in their school and the leadership status of the respondents. Four t-tests examined the relationship between teachers who occupy a position of teacher-leadership versus teachers who do not occupy a position of teacher-leadership and the four TLI factors, Sharing Expertise, Sharing Leadership, Supra Practitioner, and Principal selection. This study found no statistical significance in any of those factors. This result differed from the norm sample where teachers who were not formal leaders reported significantly high scores for Principal selection than teachers who did hold teacher-leadership positions $F(1,670) = 5.87, p = .016$. The context of this study and that of Angelle and DeHart (2011) may account for the difference. The norm sample had U.S. participants; in contrast, this study had Canadian participants. In the context of this study, the Canadian Cecilia School Division had implemented teacher-leader roles throughout its high schools to support teachers' professional development. Even more telling, both formal and informal teacher-leader roles were common practice in this Canadian study and the schism between those who held positions of leadership and those who did not was minute compared to the American norm sample. This study saw no statistical significance in the relationship between teacher perceptions of the extent of teacher-leadership and the leadership status of the respondents. This surprising finding may reinforce the pre-existing establishment of distributed leadership in the context of a Canadian urban school division. This is supported by Leithwood et al. (2009), who defined distributed leadership as being realized through the

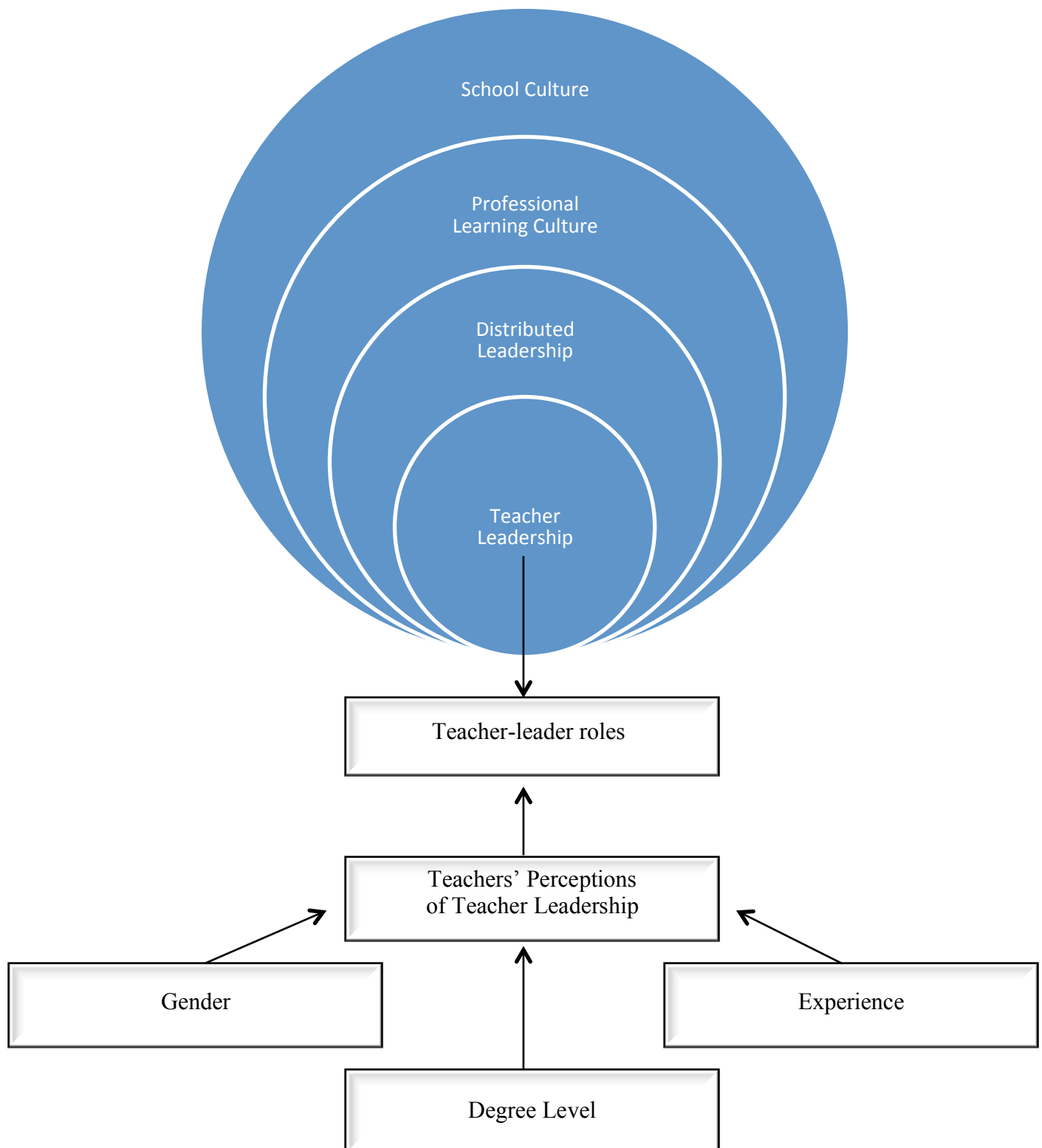
combination of a collaborative professional learning culture and a flattened bureaucratic structure. With the development of a professional learning culture and a flattened bureaucratic structure, teachers collectively engage in teacher-leadership opportunities. This positive situation creates a homogenous approach to teacher-leadership where all teachers engage in working toward a common goal. When teaching members of the professional learning community engage in this common goal, the status of a formalized teacher-leader will not change perceptions of how leadership occurs within the school.

T-tests also analyzed the four factors of the TLI (Sharing Expertise, Sharing Leadership, Supra Practitioner, and Principal Selection) to determine the differences in teachers' perceptions of teacher-leadership according to gender. Found was a significant statistical difference in Sharing Expertise in relationship to gender; overall SE found significant differences in score for males ($M = 2.32$, $SD = .696$) and females ($M = 2.57$, $SD = .547$; $t(113) = 2.293$, $p = .024$, two-tailed). Further analysis of the five questions associated with SE found all questions noted no statistical difference in relationship to gender. These results contradict those of Killingsworth et al. (2010) who found women's experiences in educational leadership to be different than that of male experiences in leadership.

The findings of this study suggest that it is important to re-examine the conceptual framework initially inspired by Angelle and DeHart (2011). In their peer-reviewed article, Angelle and DeHart stated teacher leaders are experts in their field, and their roles include a focus on student learning, an engagement of others in shared vision and meaning, and forging relationships with a sense of integrity. In addition, teacher-leadership and shared decision-making were part of the context within teacher-leaders' functions: schools that had a culture of collaboration and shared decision-making empowered teachers to share the responsibility of

school reform. Furthermore, Angelle and DeHart noted that the ability for teacher-leadership to flourish is dependent upon school leadership, placing a high level of dependency on the school administrator. This study did not reveal school administrators had a singularly similar impact. Therefore, FIGURES 5.1 Conceptual Framework of Teacher-Leadership could be an alternative conceptual framework to that of Angelle and DeHart (2011).

Figure 5.1 Conceptual Framework of Teacher-Leadership



In this new conceptual framework, school culture exists within an organic organization influenced by social context and the needs of its professional-learning culture. School culture, growth of professional-learning cultures, relationships, trust, and professional self-reflection all influence teacher-leader roles. As a result, through the framework of distributed leadership (Gronn, 2002), teacher-leadership emerges to create teacher-leader roles. In other words, actuated through the framework of distributed leadership are unique teacher-leader roles based on the professional needs and skills of the teachers within a school culture.

The perceptions of teachers regarding teacher-leadership exist on a continuum of change influenced by teacher-leaders assuming different responsibilities, by professional dialogue, by personal experiences, and by the context in which teacher-leadership exists. Influenced by their professional experience and their professional learning, teachers grow and develop as professionals. As a result, when teachers feel their needs are met, professional experience and professional learning succeed in strengthening teacher-leader roles in a learning culture. Important to note are the effects of one's perceptions on the ability of teacher-leadership to be successful.

Implications

Implications for Theory

As previously stated in Chapter One, a quantitative perspective of teachers' perceptions of teacher-leadership is insufficiently considered in educational research. Angelle and DeHart (2011) found teachers' perceptions of the formalized teacher-leader role in the context of schools has largely been lacking in the literature. Empirical evidence collected in this study via one-way between-groups ANOVA helped to address that deficiency of research. Questions that arose from this study, however, imply that researchers need to collect more data to inform adequately

on teachers' perceptions of teacher-leadership. Limitations of one-way between-groups ANOVAs became evident during the analysis stage of this study. Because of unequal sample size, data sets of the normal sample were not duplicated, and the effect sizes were medium to low. Another question that arose from the study is whether the TLI needs to consider a Canadian context. For example, the U.S. practice of principals hiring teacher-leaders is not common practice in Canada. Therefore, the Principal Selection factor might not apply to all Canadian contexts. Re-wording the questions to acknowledge different hiring practices in Canada would be of benefit. In addition, the TLI picked up on informal teacher-leadership; this will be a good contribution to the field of distributed leadership and informal leadership.

Implications for Practice

Implications for practice revealed in this study include the need for a TLI to take into consideration a Canadian context. Specifically, the Principal Selection (PS) factor could be re-written for a Canadian context in which the Principal does not hire those in teacher-leader positions, in turn increasing the Cronbach α reliability of the TLI instrument. Currently, the TLI assumes all Principals hire teacher leadership, therefore influencing teachers' perceptions of teacher-leadership. In this study, teachers occupying a position of leadership versus teachers who did not hold a position of teacher-leadership revealed no statistical significance of perceptions of teacher-leadership. As teacher-leader roles develop as a natural outcome of distributed leadership, professional-learning cultures build common perceptions. Gronn (2002), Spillane et al. (2009) supported this observation, illuminating distributed leadership as a way of thinking about the practice of school leadership within the context of leadership tasks and interactions. As a result, the increased involvement of a professional learning culture in the tasks and interactions of leadership creates a flattened leadership bureaucratic structure. An additional

implication for practice is for school divisions to build more opportunities for school cultures to strengthen distributed leadership through the practice of teacher-leader roles.

Findings from this study support Harris's (2003) definition of teacher-leadership as a dynamic organizational entity wherein teachers' collective actions develop relationships and connections among individuals within the school, regardless of their roles. This study found no statistical difference in the variables Sharing Leadership and Sharing Expertise between teachers who occupied a position of teacher-leadership and those who did not occupy a position of teacher-leadership. In the broader operations of a school division, understanding teachers' roles and how teachers embrace the role of leadership can enhance leadership across the division. A realization that distributed leadership empowers teacher capacity in teacher-leadership will strengthen a culture of professional teacher-learners.

The TLI can be useful if used as a screening instrument to examine the pre-existing relationships between teacher perceptions of the extent of teacher-leadership within a school; prior to implementing new teacher-leader roles in a school, administrators will find that the TLI can provide useful data. Knowledge of a school's pre-existing cultural norms can assist in implementing new initiatives that support a specific professional-learning culture. This study identified the relationship between years of teaching experience and gender to teacher perceptions of the extent of teacher-leadership in a school. Further studies might try to determine why these two factors showed a statistically significant difference in perceptions.

Future Research

This study is the second study to use the Teacher-Leadership Inventory (TLI) created by Angelle and DeHart (2011), demonstrating its value in the following ways. First, the TLI provided data from a unique perspective: teachers' perceptions of teacher-leadership. Harris

(2012) supported the notion that more in-depth work is required to explore distributed forms of leadership, including teacher-leadership. Until recently, insufficiently considered in educational research is a quantitative perspective of teachers' perceptions of teacher-leadership. Therefore, it is beneficial to use the TLI in more applications to collect additional data and to identify norms for the instrument. Second, examining teacher-leadership from within the context of a school culture is limited in current educational literature (Angelle & DeHart, 2011). For this reason, it is valuable to research the relationships in teacher perceptions of the extent of teacher-leadership in a school.

The processes of this study provided a challenge to identify appropriate uses of the TLI instrument. Running successful one-way between-groups ANOVA requires a large sample size; therefore, the TLI instrument would be well-suited for a large school division and/or a school division looking at teacher perceptions of teacher-leadership across grade levels. In addition, measuring teacher perceptions of teacher-leadership prior to new teacher-leadership initiatives would well serve a school division implementing teacher-leader roles. An understanding of teachers' perceptions of teacher-leadership within a school or school division can help to guide policymakers to support teacher leadership in the most efficient manner. Furthermore, the TLI could accomplish a longitudinal study examining the changes, if any, of teacher perceptions of teacher-leadership with the implementation of new teacher-leadership initiatives.

Findings from teacher perceptions by years of experience point to the need for neophyte teachers to engage in sharing expertise. Not only are they searching for colleagues with whom they can share professional knowledge, but they also place a high value on other teachers' willingness to share expertise. From this study, questions that arose for future research include these: Are school cultures set up to encourage professional dialogue among all levels of

experience? How do teacher-leaders engage all teachers across varying years of experience? What can school administrators do to accommodate the needs of neophyte teacher-leaders? Can neophyte teachers be effective teacher-leaders when more experienced teachers do not engage in professional learning cultures in a similar manner?

Recognizing gender as a category for analysis, Killingsworth et al. (201) and Tabbodi (2009) both found female experiences of leadership to be different than that of males in the field of educational leadership. In contrast, this study found no statistical difference based on the variable gender. This significant contribution may indicate there is a difference in how the genders experience both formal and informal leadership in a Canadian context. Further, study of the experiences of teacher-leadership according to gender will be valuable to research in the future.

In addition, unique to the Saskatchewan is the responsibility of Saskatchewan principal to work in cooperation with staff (Education Act, 1995). The findings of this study supported a collaborative working relationship between principal and teachers in that there were no statistical differences according to the variable Principal Selection. Further research might compare PS across Canada and look at the Education Acts of each province so see if there is a connection of the experiences of principal and teachers and their provincially respective Education Acts. The question can be asked, how much influence does the Education Act have on principal leadership?

According to Saskatchewan's *Education Act* of 1995, the duties of a principal include the supervision of the school's professional staff and exercising leadership in co-operation with the Director. Unique to Saskatchewan is the responsibility of a Saskatchewan principal to work in cooperation with staff; principals and teachers within the school are members of the same professional organization: the Saskatchewan Teachers Federation. As such, principals provide

leadership to teacher colleagues.

Limitations of the Teacher-Leadership Inventory (TLI)

Called into question in this study is the reliability and trustworthiness of the Teacher-Leadership Inventory (TLI). The TLI instrument scored a Cronbach α reliability of .85; by way of contrast, the factor of Principal Selection (PS) had an α reliability of .56. Consequently, this factor does not represent a good indicator of teachers' perceptions of teacher-leadership.

According to the data collected in this study for the independent variables of degree level attained, years of teaching experience, occupying a position of leadership, and gender, no statistical significance appeared. Consequently, researchers in the field need to conduct more research, creating more data to inform and enlighten teachers' perceptions of teacher-leadership.

Because of the low reliability of the Principal Selection factor, the researcher would recommend re-development of the TLI instrument to overcome that weakness. Future studies might try to refine the TLI to improve the reliability of this factor or simply eliminate the questions associated with said factor. When re-developing PS questions, a researcher would find it useful to consider a Canadian context to the factor. Another option would be to administer studies without the three questions associated with the PS factor.

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APPENDICES

APENDIX A:
LETTER FOR PERMISSION TO ACCESS

Letter for Permission to Access

[Insert date]

Dear Superintendent (insert name);

This letter is a request to allow me to conduct my research titled *Highs School Teachers' Perception of Teacher-leadership* in the Greater Saskatoon Catholic School division. The purpose of this study is to investigate high school teachers' perceptions of teacher-leadership.

This is a request invite all high school teachers within your division to participate in this study. My initial contact with high school Principals via e-mail will ask for access to potential participants at staff meetings. Principals who agree to have me contact teachers through a staff meeting will be contacted to arrange a suitable time to address the teaching staff of their school. Following this stage, an e-mail will be distributed via school principals, inviting all participants to complete the web-based survey. The participants will be given a week to complete the survey. A reminder e-mail will be sent out five working days after the initial invitation, to remind them to complete the survey. I will explain to the potential participants that I am doing a study and will ask them if they would completing an on-line questionnaire, which would take approximately 8-10 minutes to complete. Participants may choose to be involved in the study by completing the on-line survey.

I will take great care to ensure that the privacy and confidentiality of all participants will be preserved. The information about the participants gathered by our server include only the date and time of the complete surveys. I will also be as unobtrusive as possible, and will ask each teacher to participate on their own time and at their convenience.

All potential participants will be given access to a copy of the results of the study at the completion of the study through the school principal. The results will be presented as data in my thesis and may influence policy and practice of teacher-leadership at the high school level.

I ask your cooperation by allowing me access to these individuals by confirming and signing this form, and, if possible, endorsing/supporting my study to the superintendents, coordinators and teachers involved. Thank you for your support!

Cristin Dorgan Lee
Graduate Student

Department of Educational Administration
University of Saskatchewan

Superintendent (insert name) Date

APPENDIX B:

Letter of Invitation to Participate in Survey

Letter of Invitation to Participate in Survey

Cristin Dorgan Lee, M.Ed. Candidate
Department of Educational Administration
College of Education
University of Saskatchewan
28 Campus Drive
Saskatoon, SK S7N 0X1
February, 2013

RE: LETTER OF INVITATION TO PARTICIPATE IN SURVEY

Dear teacher,

My name is Cristin Dorgan Lee, and I am a M.Ed. candidate with the Department of Educational Administration at the University of Saskatchewan and I currently a teacher in the Greater Saskatoon Catholic School Division. My study is titled *Teachers' Perceptions of Teacher-leadership*. This study will be included as a partial fulfillment of a master's of education as well as possible journal articles, conference presentations or local publication.

The purpose of this study is to investigate high school teachers' perceptions of teacher-leadership. Using a quantitative study, an inquiry will be conducted into teachers' perceptions of teacher-leadership and what influences their perceptions.

At this stage of the research, I am asking high school teachers to complete a survey. Your participation is voluntary and anonymous. The process will take between 8-10 minutes to complete. You can stop completing the questionnaire at any time, and you can decide not to submit your responses. All information is collected confidentially via web-based survey. The only identifying information gathered is the date and time each survey is completed. No IP address will be identified in the survey. Once the data is submitted, the researcher will not be able to identify responses of any individual to with draw it.

Participating in this activity will provide valuable information for literature, theory and practice. A deeper understanding of teachers' perceptions of teacher-leadership may enable educators and policy makers to make more informed decisions about the development of teacher-leadership and the supports needed for effective teacher-leadership. As well, it is hoped that this study will encourage a more complete understanding of what influences teachers' perceptions of teacher-leadership. Your cooperation in the survey of *Teachers' Perceptions of Teacher-leadership* would be greatly appreciated.

Please follow this link to complete the survey [insert link].

This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office ethics.office@usask.ca (306) 966-2975. Out of town participants may call toll free (888) 966-2975.

By completing and submitting the questionnaire, YOUR FREE AND INFORMED CONSENT IS IMPLIED and indicates that you understand the above conditions of participation in this study.

If you have any questions or concerns about the survey or the main study, please contact me by e-mail at cdorganlee@gscs.sk.ca or by telephone (244-0149). Thank you, in advance, for your consideration and cooperation in participating.

Respectfully yours,
Cristin Dorgan Lee
M.Ed. Candidate
University of Saskatchewan

Teacher
Greater Saskatoon Catholic School Division

APPENDIX C:
TEACHER-LEADERSHIP INVENTORY

Teacher-Leadership Inventory

For each statement below, indicate how often this occurs in your school. Mark only one response per item.

	Routinely	Sometimes	Seldom	Never
	O	O	O	O
1. Teachers ask one another for assistance when we have a problem with student behavior in the classroom.	O	O	O	O
2. Other teachers willingly offer me assistance if I have questions about how to teach a new topic or skills.	O	O	O	O
3. Teachers here share new ideas for teaching with other teachers such as through grade/department meetings, school wide meetings, professional development, etc.	O	O	O	O
4. Teachers discuss ways to improve student learning.	O	O	O	O
5. Teachers are involved in making decisions about activities such as professional development, cross-curricular projects, etc.	O	O	O	O
6. Teachers are actively involved in improving the school as a whole.	O	O	O	O
7. Teachers stay current on education research in our grade level/subject area/department.	O	O	O	O
8. Teachers willingly stay after school to work on school improvement activities.	O	O	O	O
9. Teachers willingly stay after school to help other teachers who need assistance.	O	O	O	O
10. Teachers willingly stay after school to work with administrators, if administrators need assistance.	O	O	O	O
11. Administrators object when teachers take on leadership responsibilities.	O	O	O	O
12. The principal responds to the concerns and ideas of teachers.	O	O	O	O
13. Teachers plan the content of professional learning activities at my school.	O	O	O	O
14. Teachers have opportunities to influence important decisions even if they do not hold an official leadership position.	O	O	O	O
15. The principal consults the same small group of teachers for input on decisions.	O	O	O	O

16. Time is provided for teachers to collaborate about matters relevant to teaching and learning.

☐ ☐ ☐ ☐

17. Most teachers in leadership positions only serve because they have been principal appointed.

APPENDIX D:
DEMOGRAPHIC PERSONAL BACKGROUND

DEMOGRAPHIC PERSONAL BACKGROUND

Mark the response which best fits yourself

1. Gender
 - a. Female
 - b. Male
2. Highest level of education attained
 - a. Bachelor
 - b. Bachelor and certificate
 - c. More than one Bachelor
 - d. Master
 - e. Master + c.u. or PhD
3. Years of teaching experience.
 - a. First Year
 - b. 1-5 years
 - c. 6-9 years
 - d. 10-15 years
 - e. 16-20 years
 - f. 21-25 years
 - g. 26+ years
4. Do you currently occupy one of the following positions of formal teacher-leadership? (Learning Literacy Leader, Teacher on Assignment, English as an Additional Language teacher, Learning Assistance Teacher, Department Head, Administrator)
 - a. Yes
 - i. If Yes select one of the following
 1. Learning Literacy Leader
 2. Teacher on Assignment
 3. English as an Additional Language Teacher
 4. Learning Assistance Teacher
 5. Department Head
 6. Administrator
 - b. No

APPENDIX E:

Script for Recruitment

My name is Cristin Dorgan Lee and I am a graduate student in the Department of Educational Administration and currently a teacher in the Greater Saskatoon Catholic School Division. I am conducting research on the topic of teacher-leadership, and I am here today to invite you to participate in my study.

The purpose of my study is to investigate high school teachers' perceptions of teacher-leadership. Using a quantitative study, an inquiry will be conducted into teachers' perceptions of teacher-leadership and what influences teachers' perceptions.

As a participant in this study you will be asked to read the letter of Invitation to Participate in Survey, answer background informational items, then complete a 17- item questionnaire. It is anticipated to take approximately 8-10 minutes to complete the survey. Your participation is voluntary and anonymous.

You can stop completing the questionnaire at any time, and you can decide not to submit your responses. All information is collected confidentially via web-based survey. The only identifying information gathered is the date and time each survey is completed. No IP address will be identified in the survey. Once the data is submitted, the researcher will not be able to identify responses of any individual to withdraw it.

Your privacy and confidentiality are of my utmost priority. Therefore, the only identifying information gathered will be the date and time each survey is completed. Once all data has been collected and analyzed I will share the research through my thesis and make it available to everyone.

The reliability of my research depends on your willingness to participate and complete

the survey. Should you have any questions I am available to answer your questions.

Thank you in advance, for your anticipated participation in this research.